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ABSTRACT

Utopian socialists believed that socialism is inevitable because it is a more rational system to organize production and life, a system more in line with the “good” nature of human beings. Marxism rejected this reasoning replacing it with what is known as historical materialism: social systems, it argued, emerge, develop and die not because they correspond more or less to the “natural” aspirations of the people, but because they become more or less competitive in the process of historical evolution – a version of social Darwinism applied not to individuals, but to communities and countries. In particular, Marxism stated that capitalism develops productive forces up to the point when they can no longer be managed efficiently in societies with markets and private property; at this point social property of the means of production and centrally planned economy (CPE) become a more efficient way of managing productive forces, whose social nature has outgrown the narrow capitalist limits. This prediction did not come true – in the XX century socialism came to being not in most advanced capitalist countries, but in the periphery and semi-periphery (USSR, Eastern Europe, China, North Korea, Cuba), and only in North Korea and Cuba it survived into the XXI century.

This paper explains why capitalism was competitive in recent 500 years, and why an attempt in the XX century to replace it by socialist CPEs did not succeed. But it argues that there are other reasons, not associated with “social nature of productive forces”, which are finally going to make socialism competitive: the costs of numerous negative consequences of high income inequalities, like greater social tensions, high crime and poor institutional capacity of the state, become larger than the benefits of high savings and investment rate that were making capitalism competitive for 500 years. This “new socialism” will not be necessarily mean a total elimination of markets and private property, but is likely to limit both substantially for the sake of achieving lower income inequality.

¹ The opinions expressed herein are strictly personal and do not necessarily reflect the position of organizations with which the author is associated.

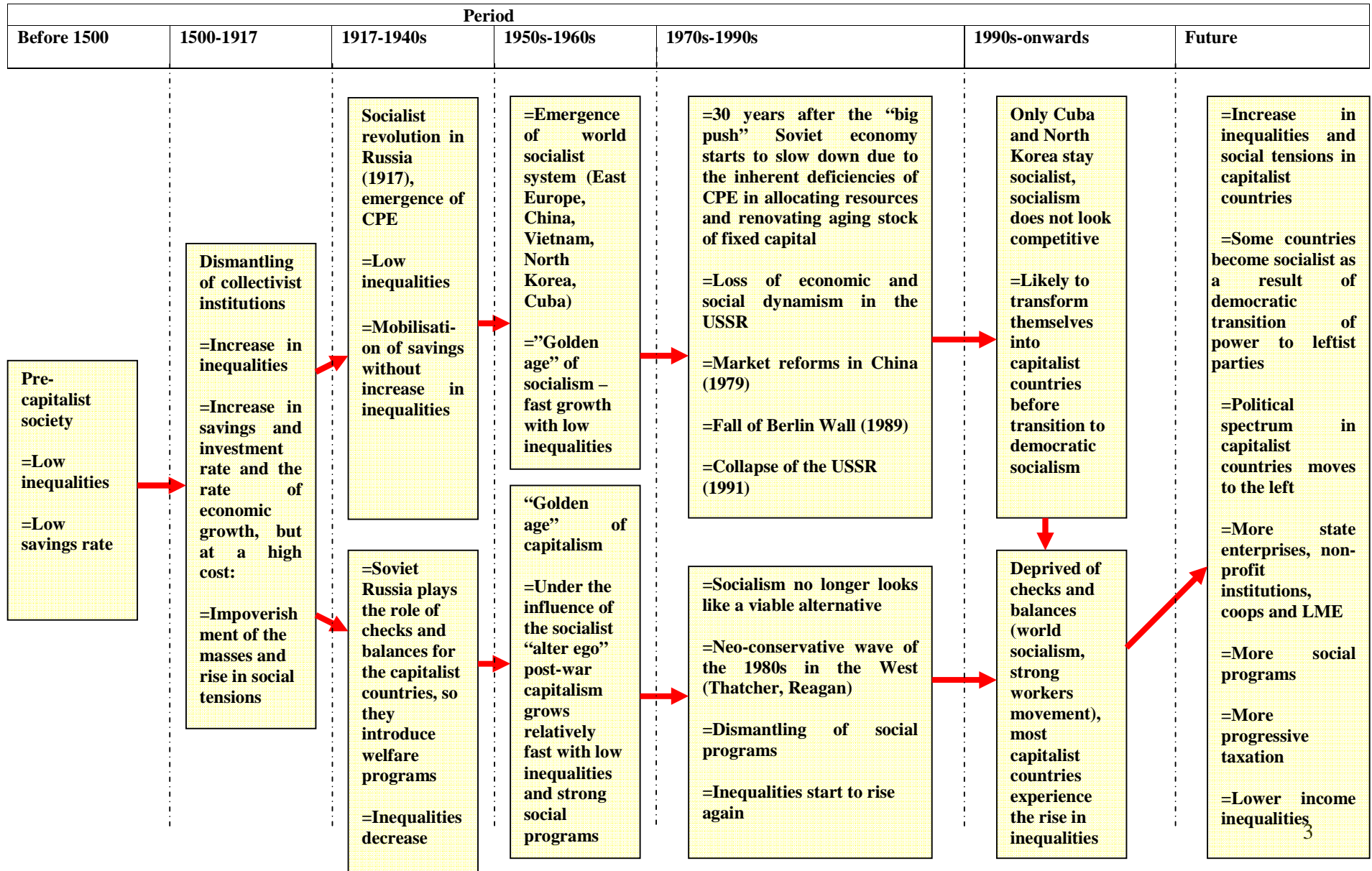
SOCIALISM IS DEAD, LONG LIVE SOCIALISM!

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Robert Heilbroner, the author of the “Worldly Philosophers”, the most famous economic history book ever, wrote that political economy tradition is different from economics that emerged later. Classical economists were interested in the dynamics of the capitalist system, trying to explain how capitalism emerges, develops, reaches maturity, and dies, whereas economics is preoccupied with equilibrium and optimum in the basically static and allegedly eternal market system (Heilbroner, 1999). This paper follows the political economy tradition and asks a question why in future capitalism will die and will be replaced by a more advanced form of social organization.

The logic of the argument in a nutshell is presented in the scheme below. Capitalism emerged in the 16th century after traditional societies started to dismantle community institutions (in Britain – enclosure policy). This led to the increase in income inequality, which pushed up savings rate, investment and productivity growth, but at a price of impoverishment of the masses and growing social tensions. Until XX century though, capitalism was competitive because gains from productivity growth outweighed losses from rising inequalities and social polarisation. But growing social tensions finally resulted in the Russian 1917 revolution that gave birth to socialist society that proved to be able to lower inequalities and mobilize domestic savings for the catch up development. The existence of the USSR had a moderating effect on the world capitalism – it started to acquire a human face by expanding social programs and lowering inequalities, especially after the Second World War and the emergence of the world socialist system. Centrally planned economy, however, had inherent deficiencies in allocating resources and replacing aging fixed capital stock, so the Soviet economy started to slow down in the 1960s, 30 years after the ‘big push’. It finally led to the loss of economic and social dynamism, to the collapse of socialism in USSR and Eastern Europe, and to gradual transformation of socialism into capitalism in China and Vietnam. Left to themselves, without government regulations and checks and balances, competitive markets tend to increase inequality endlessly and this is exactly what is happening after 1980 in most capitalist countries. Chances are that this growing polarisation will result in the democratic transition to the new social organization that would be more competitive than capitalism due to its ability to maintain high savings and investment without high inequalities.

Scheme. Transitions to and from capitalism

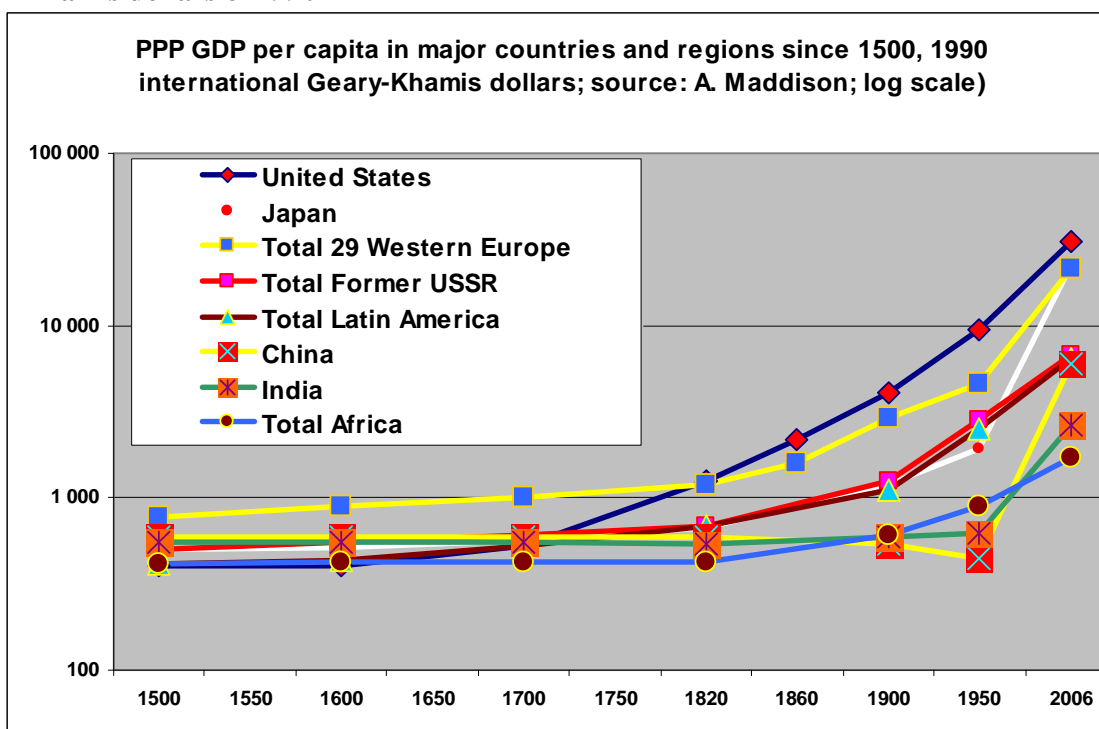


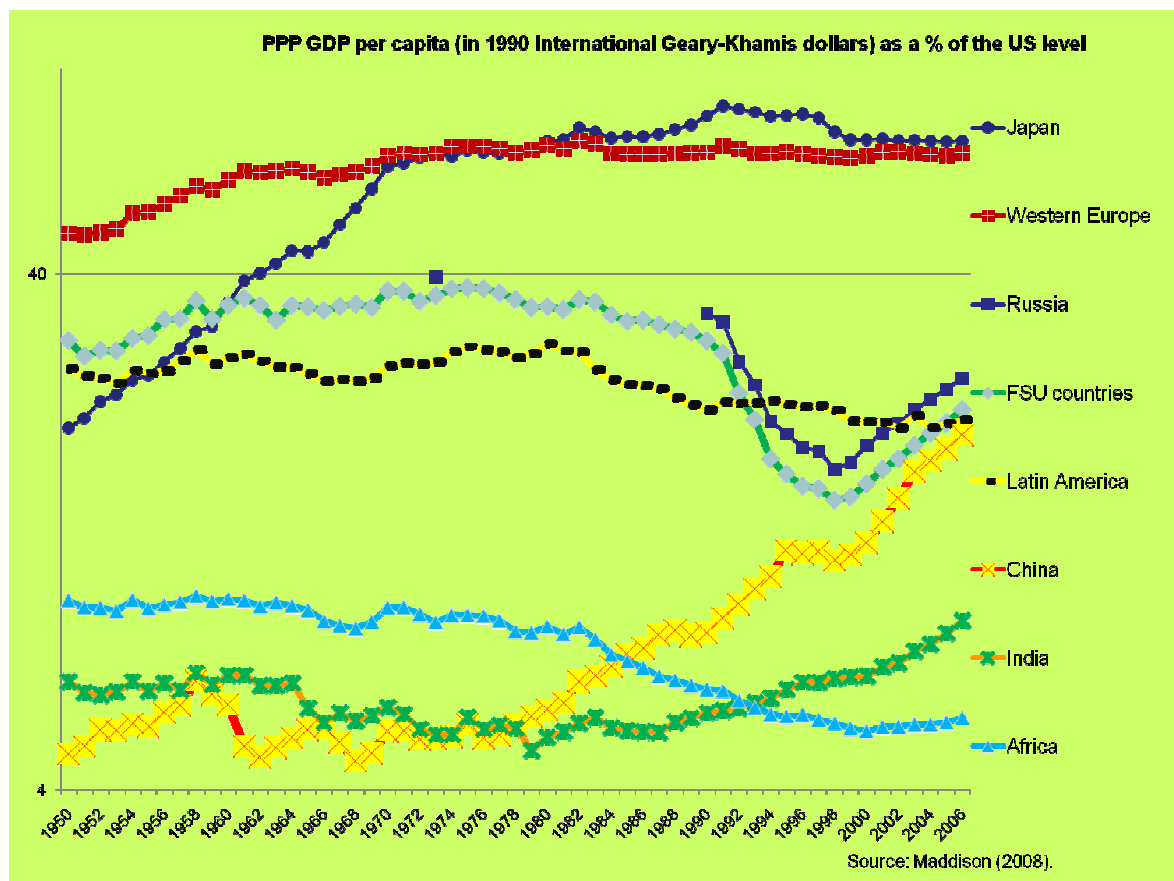
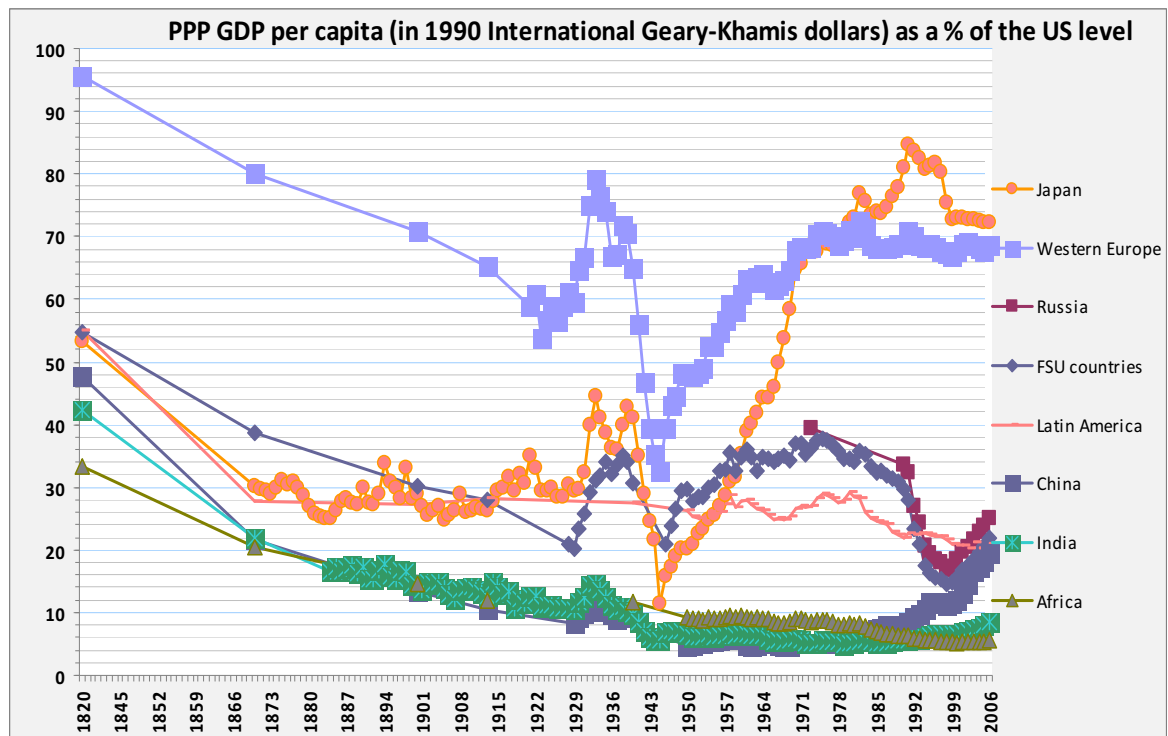
Why capitalism was competitive?

To start from the very beginning, one has to answer a question why capitalism became more competitive than other social systems. The hard fact is that before 1500, countries that are now called “the West” were no more developed than the rest. All countries had roughly the same GDP per capita (about \$500 in 1990 prices), similar life expectancy, consumption and education (literacy) levels (Mel’yantsev, 2006; Maddison, 2008).

Since the 16th century the West started to grow faster than “the rest” by one or even two orders of magnitude, so that by 1900 the gap between the groups of countries that are now called developed and developing increased to 6:1. In 2000, it was roughly at the same level although in the second half of the twentieth century, several developing countries/territories (Japan, South Korea, Taiwan, Singapore, and Hong Kong) managed to join the “rich club,” while others (Southeast Asia, China and more recently – India) succeeded in considerably bridging the gap with rich countries; other regions (Sub-Saharan Africa, Eastern Europe, and FSU) fell behind or failed to reduce the gap with the West (fig. 1.1).

Fig. 1. PPP GDP per capita in major countries and regions since 1500, international Geary-Khamis dollars of 1990





Source: Maddison, 2010.

Productivity growth in Western Europe in the first millennium was not only absent, but in fact was negative. In most countries, according to Maddison (2008), there was no increase in per capita GDP, whereas in Italy it actually fell by about 50% - from \$809 in the 1 AD to 450 in 1000 AD. The next 500 years saw a slow recovery to the income levels achieved in the Roman Empire – per capita GDP grew by 0.13 % a year and nearly doubled. Since 1500, however, in the Netherlands and then in Britain growth of per capita income accelerated to 0.25-0.6% a year and in the 19-20th century growth in Western Europe and the US increased to 1-2% a year (table 1).

Table 1. Per capita GDP growth rates, %

Countries/periods	1-1000	1000-1500	1500-1600	1600-1700	1700-1820	1820-1900	1900-2000
The Netherlands	0	0.12	0.60	0.43	-0.12	0.78	1.89
United Kingdom	0	0.12	0.31	0.25	0.26	1.22	1.52
Italy	-0.06	0.18	0	0	0.01	0.59	2.38
Total 12 Western Europe	-0.03	0.13	0.13	0.13	0.16	1.14	1.89
US	0	0	0	0.28	0.73	1.49	1.96

Source: Maddison, 2010.

This transition to modern economic growth after millennia of stagnation and centuries of slowly creeping forward productivity was a truly groundbreaking event in human history. To understand the magnitude of change: with 0.1% annual growth it takes nearly 700 years to double the initial level, with 0.5% annual growth it takes nearly 140 years, with 1% annual growth – 70 years, with 2% – 35 years.

The usual explanation of how the West got rich ahead of others is that countries that we now call developed, or the West, acquired in the 16th century and afterwards some features that were absent in more traditional societies. The list of these features is mostly associated with capitalism and democracy and ranges from abolition of serfdom and protestant ethics to protection of property rights and free universities. The problem with this reasoning is that it is assumed that these features emerged initially only in North-Western Europe and only in the 16th -18th century. However, in fact, there were many countries before the 16th century (ancient Greece is just one example) with social structures that possessed or were conducive to many of these same features, but they never experienced productivity growth comparable to the one that started in Britain and

the Netherlands in the 16th century and later – in the rest of Europe (0.2-0.3% a year in 1500-1800 and 1% and more a year afterwards).

A different interpretation (Popov, 2009; 2014) accepted in this paper is that Western countries exited the Malthusian trap by dismantling traditional collectivist institutions, which led to increased income inequality and allowed the redistribution of income in favour of savings and investment at the expense of consumption. At a low level of income allowing inequalities to rise was the only way to increase voluntary savings rate. But there was also a downside of growing inequalities – a decline in life expectancy and an increase in social tensions that undermined the institutional capacity of the state. The elimination of collectivist (community) institutions was thus a risky experiment that speeded up growth at a price of putting the masses of population below the subsistence minimum and causing a reduction or slow down of growth of the population – the foundation of the military might (number of people – number of soldiers) in the Malthusian growth regime.

Early attempts to ensure the priority of the rights of individual over the rights of the community at the expense of collective interests and low inequality (Greece, Rome, Byzantine) led to the impoverishment of the masses, higher mortality and foreign conquest. Only in Northwest Europe in the 16-18th centuries this policy somehow succeeded for the first time in history.

It is not the abundance of competition or entrepreneurship or ideas for technological innovations that allowed the West to accelerate the growth rates of productivity by the order of magnitude, it is first and foremost the abundance of savings and investment that resulted from growing income inequalities and allowed to increase the capital/labor ratio and to cast in metal the ideas for new products and technologies. To put it differently, the West became rich not due to its inventiveness and entrepreneurial spirit, but due to cruel and merciless dismantling of community that previously provided social guarantees to the poorest.

Savings rate is determined by many factors (Norman, Schmidt-Hebbel & Luis Servén 2000), but at a low level of income the crucial factor is income inequality. At the very low level of income (subsistence minimum) people are not making any savings, all income is used for consumption. Increase in inequality resulting from redistribution of income will lead to the reduction of consumption by the poor (they will not make any savings, and possibly would

even die out), but the rich will make more savings not being able to consume all increased income.

Micro studies consistently show that the rich households and individuals save more than the poor, but the national savings rate is not necessarily higher in countries with high inequalities. Redistribution and increase in inequalities will lead to higher savings of those who get rich, but to lower savings of those that are getting poorer. These two effects could cancel one another. That is why current research does not show any link between inequalities and savings rate neither for developed, nor for developing countries (Schmidt-Hebbel, & Serven, 2000). But at low levels of income the increase in national savings, provided that the productivity is constant, is possible only through redistribution from rich to poor because at low levels of income elasticity of savings on income is very low: reduction of income of the poor does not lead to decline in savings (which are extremely low to begin with), whereas increase in income of the rich leads to an increase in savings.

The hard fact is that savings and investment rates before 500 years ago were very low, less than 5% of GDP only, so that investment was barely enough to replace the retiring elements of fixed capital stock and to create jobs for the new entrants into the labor force. There wasn't much left to increase capital/labor ratio – the key determinant of the productivity, so per capita GDP virtually did not grow over time.

Enclosure policy and the Industrial Revolution resulted in a dramatic increase in income inequality, which led to the increase in the national savings rate. Despite the acceleration of productivity growth in 1500-1800 in the UK (to about 0.2 percent a year, so that GDP per capita in the UK more than doubled over three centuries²), the living standards of workers did not improve. “The single most important fact is that there is no evidence of any significant rise in material living standards for average workers in any societies before 1830” (Goldstone, 2007). Real wages actually fell between 1500 and 1800 (Saito, 2009). This is consistent with the story of rising income inequality, accumulation of wealth in the hands of a few, and

² GDP per capita in the UK increased in constant 1990 international Geary-Khamis dollars from \$714 in 1500 to \$974 in 1600, to \$1250 in 1700, and to \$1706 in 1820 (Maddison, 2010).

increasing savings and investment rates (the latter increased during the Industrial Revolution from a mere 6 percent in 1760 to 12 percent in 1831—Galor, 1998)³.

Even in the second half of the 19th century national savings amounted only to 10-15% of GDP in major European countries and in Japan; only in the United States savings and investment rates steadily exceeded 20% in 1874-1899 (Taylor, 1996). In 1890-1913 gross savings rates in Australia, Canada, France, Japan, and UK were estimated in the range of 9 to 15% only (table 2).

Table 2. Total gross savings as a ratio of GDP at current market prices, %

Period/ Countries	1870-89	1890- 1913	1914- 38	1939- 49	1950- 73	1974- 88
Australia	11.2 ^a	12.5 ^a	12.2	24.3	22.0	13.8
Canada	9.1 ^b	12.2 ^b	14.4 ^b	22.5	21.4	19.3
France	12.8	14.7	n.a.	n.a.	23.4	22.1
Germany	n.a.	n.a.	12.8 ^c	n.a.	26.7	22.4
India	n.a.	5.8 ^d	7.4	6.7	12.8	20.3
Japan	12.4 ^e	12.4 ^e	16.7 ^e	24.8 ^e	32.8	32.8
Korea	n.a.	n.a.	4.3 ^f	n.a.	8.1 ^g	27.9
Netherlands	n.a.	n.a.	15.2 ⁱ	n.a.	26.6	22.1
Taiwan	n.a.	9.6 ^j	25.5 ^k	n.a.	19.9	33.2
UK	13.9	13.6	8.8	2.5	18.4	18.5
USA	n.a.	18.0	17.0	15.2	19.6	17.9

a) excludes inventories; b) 1870-1926 excludes inventories; c) 1925-38; d) 1900-13; e) 1885-1940 excludes inventories and first entry is for 1885-9; f) excludes part of inventories; g) 1953-73; h) 1953-9; i) 1921-38; j) 1903-13 and excludes part of inventories; k) excludes part of inventories.

Source: Maddison, 1992.

Today many developing countries, especially least developed ones, have very low domestic savings and investment rates (fig. 2, 3). Normally growth rates of such countries are low or even negative – the relationship between savings rate, investment rate and growth rates of GDP is one of the most robust in empirical research of economic growth (fig. 4). For such countries

³ According to C. Feinstein, the saving rate as a percent of GDP was below 8% in the first half of the 18th century. It started to rise in the 1740 or 1750s and reached 13-14% in the 1810-60 (Feinstein, 1978).

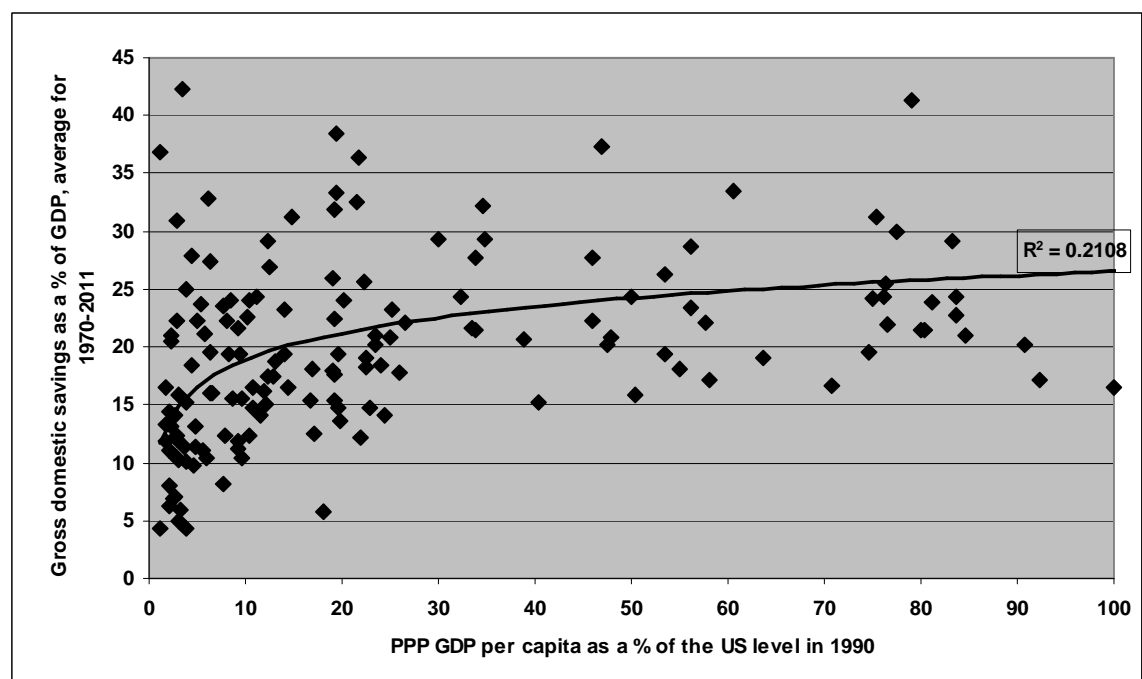
mobilisation of domestic savings or savings from abroad is pre-condition for successful development and catch up with rich countries.

Fig. 2. Total savings in Argentina, % of GDP



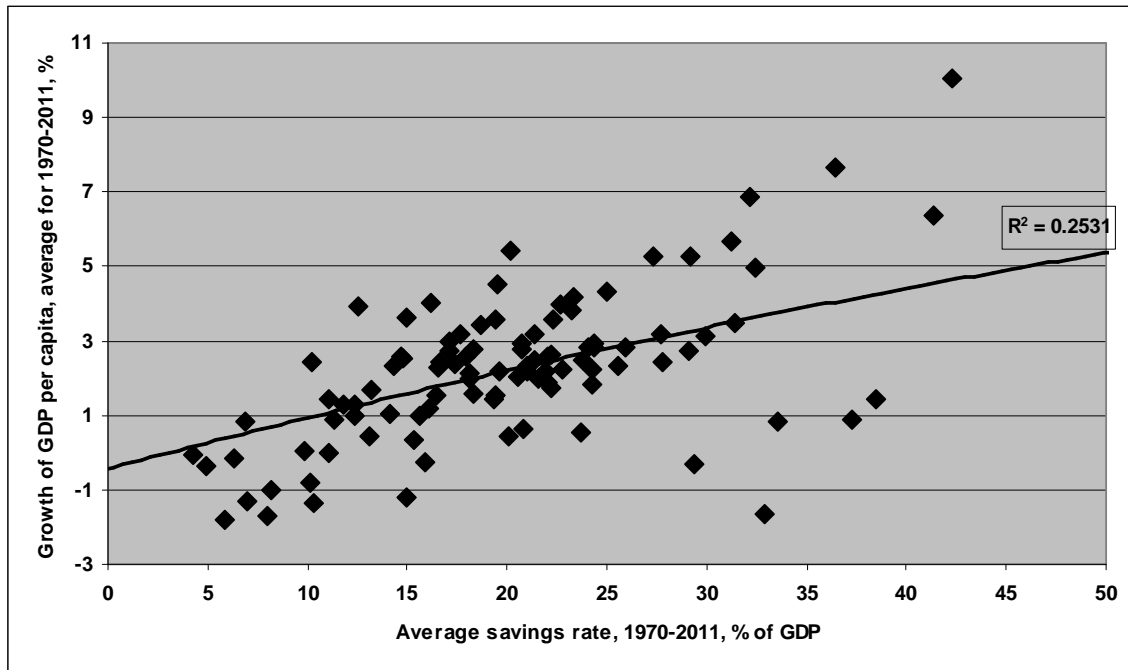
Source: Taylor (1996).

Fig. 3. Gross domestic savings as a % of GDP in 1970-2011 and PPP GDP per capita as a % of the US level in 1990



Source: World Development Indicators database.

Fig. 4. The ratio of gross domestic savings to GDP and average annual growth rates of GDP per capita in 1970-2011, %,



Source: World Development Indicators database.

Developing countries entered the period of modern economic growth (Kuznets, 1966) with high savings and investment rates only one or two hundred years after developed countries or even later. Even Argentina, that was considered to belong to a rich country club in between two world wars, never had a 10 year average savings rate of over 10% before the 1930s (fig. 2) In India before independence (1900-49) savings rate stayed at a level of 6-7% only; in Korea in 1914-38 – 4% of GDP (table 2).

It is the Lewis model of economic growth that assumes the unlimited supplies of labour in agriculture that keeps wages low despite rapid accumulation of capital in industry. In the words of Arthur Lewis, “the central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 per cent of its national income or less, converts itself into the economy where voluntary saving is running at about 12 to 15 percent of national income or more. This is the central problem because the central fact of economic development is capital accumulation” (Lewis, 1954).

Thanks to higher savings rate and higher investment, by 1800 productivity in the West was already 2 to 3 times higher than in the rest of the world, the Western military might was predominant and the possibility of defeat in a direct military conflict with non-Western societies was negligible. But the social costs were mounting — inequalities grew, masses of population were impoverished, contributing to social tensions and weakening of institutional capacity of the state.

There is a view that competitive capitalism, left to itself, without any government regulation, can ensure a fair and stable distribution of income and an “optimal” degree of inequality – all agents, the owners of labour, capital, land, intellectual property, etc., are getting remuneration equal to their marginal productivity, which brings social harmony. Only market imperfections, such as credit constraints and lack of access to education, can result in “unreasonable inequalities”. This view, however, is not shared by all economists. “Markets, by themselves, even when they are stable, often lead to high levels of inequality, outcomes that are widely viewed as unfair”, writes Joseph Stiglitz (2014, p. 9). Piketty (2014) believes that rising inequality is a long term trend caused by the increase in wealth (capital) to output ratio, K/Y , that leads to the rise of the share of capital in national income (“patrimonial capitalism”) and that this trend will continue into the future. True, is not clear, if the increase in capital versus labour would not cause the decline in the rate of profit that will counterbalance the growth of capital (Milanovic, 2014). But even with a stable K/Y ratio increase in inequality in perfectly competitive markets seems to be quite inevitable.

For the sake of the argument, imagine a society of entrepreneurs that have exactly the same income and that are owners of capital and workers at the same time with no hired labour. It is quite obvious that in a period of time there would be polarization – some will do worse than the others and will have eventually to sell their businesses to the ones that are better off, will become proletariat and will compete for jobs at businesses of their more fortunate peers. This in fact is happening in rural countries – peasant differentiation leads to higher inequalities.

To continue the example, there is a concentration of capital going on because large companies have the advantages of scale and scope and, *ceteris paribus*, are better suited to surpass competitors. The trend of the perfect market is to end up with one super-company controlling the whole world, and one individual controlling this company, but it does not happen due to

anti-trust legislation, progressive taxation, social programs, and other counterweighing policies.

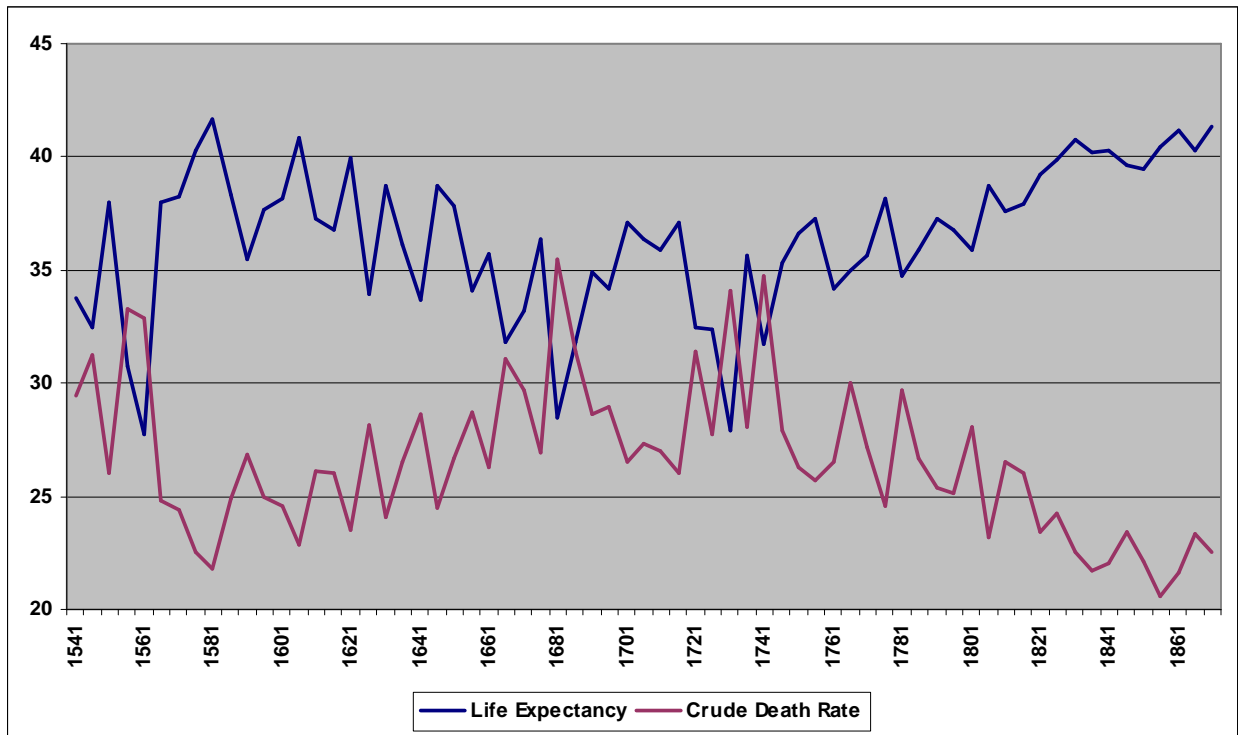
There are other factors, of course, that influence inequality trends. CEOs and top managers, as Piketty notes himself, are not rewarded according to their marginal productivity, but rather by collusion between them and the owners. The markets are far from being perfect and monopolies, or at least oligopolies, in the market are the rule rather than the exception. The Kuznets (1955) hypothesis is that there is an inverted U-shape relationship between economic growth and inequality – it increases at the industrialization stage, when the urban-rural income gap rises, and declines later with the rise of the welfare state. But current empirical research does not find much support for the existence of Kuznets curve. The long term dynamics of inequalities seem to be such that they increased in 1500-1900 probably reaching an all time peak in the early 20th century (see charts in the last section) and only after the First World War and Russian 1917 revolution started to decline. .

The social costs of growing inequalities were numerous. At the initial stage (enclosure policy) masses of the population were driven below the poverty line and literally died out. Life expectancy declined from about 35 to 40 years to about 30 to 35 years in 1560-1730 (fig. 5). Annual average population growth rates in Britain fell from 0.7 percent in 1000-1500 to 0.4 percent in the sixteenth century and to 0.3 percent in the seventeenth before increasing to 0.9 percent and 0.8 percent in the eighteenth and nineteenth centuries. The respective figures for twenty-nine West European countries were: 0.8 percent, 0.3 percent, 0.1 percent, 0.5 percent, and 0.7 percent (Maddison, 2008).

To add insult to injury, increase in inequalities and social polarisation weakened state institutions. Institutional capacity of the state, according to a narrow definition, is the ability of the government to enforce laws and regulations. While there are a lot of subjective indices (corruption, rule of law, government effectiveness, etc.) that are supposed to measure the state institutional capacity, many researchers do not think they help to explain economic performance and consider them biased (Khan, 2007). The natural objective measures of the

state institutional capacity are the murder rate – non-compliance with the state’s monopoly on violence⁴, and the shadow economy – non compliance with the economic regulations.

Fig. 5. Mortality Rates and Life Expectancy (at birth) in the Course of Early Urbanization: England 1540-1870



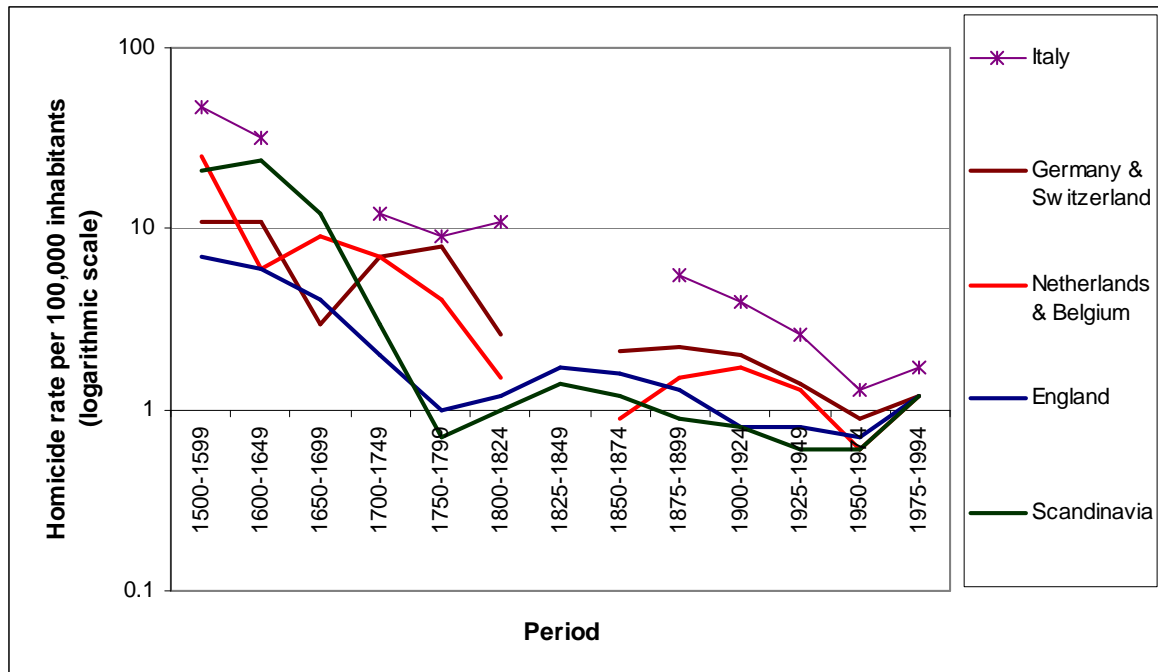
Source: Wrigley and Schofield, 1981, p. 231.

Western Europe had a murder rate of over 40 per 100,000 inhabitants in the 16th century; it took 300 years to move to current levels of 1-2 murders per 100,000 inhabitants in the 19th century and beyond (fig. 6). Even in the seventeenth century, the murder rates in Western Europe generally exceeded 10 per 100,000 inhabitants — more than in many developing countries with a similar level of GDP per capita today. The US murder rate in the 19th century stayed at a level of 10-20 per 100,000, and in the 20th century – about 5 to 10 (Fisher, 2011).

⁴ Crimes are registered differently in different countries—higher crime rates in developed countries seem to be the result of better registration of crimes. But grave crimes, like murders, appear to be registered quite accurately even in developing countries, so international comparison of murder rates is well warranted. See Popov, 2011.

By the beginning of the 19th century European murder rates fell to the current level of 1-2 per 100,000 inhabitants, but the social development until the beginning of the XX century could hardly be characterized as peaceful – revolutions happened one after another (Europe – 1830 and 1848, France – 1871, Russia – 1905 and 1917, Hungary and Germany – 1918).

Fig. 6. Long term homicide rates in Europe per 100,000 inhabitants



Source: Eisner, 2003.⁵


In developing countries that followed the Westernization path (Latin America, Sub-Sahara Africa, Russia), either as part of colonial empires or more or less voluntarily, there was an unprecedented increase in income inequalities, crime and social tensions.

In Russia the Emancipation Act of 1861 led to the dramatic rise in income and wealth inequalities and speeded up the differentiation of peasantry. As table 3 shows, the share of “middle class” peasants remained stable at a 50% level in 1600-1860, but fell to 23% by the end of the 1800s at the expense of the increase in the share of wealthy peasants on the one side, and poor peasants on the other. As a result, the number of peasant disturbances increased from

⁵ All 398 local estimates from the History of Homicide Database; national series for Sweden, England and Wales, Switzerland, and Italy.

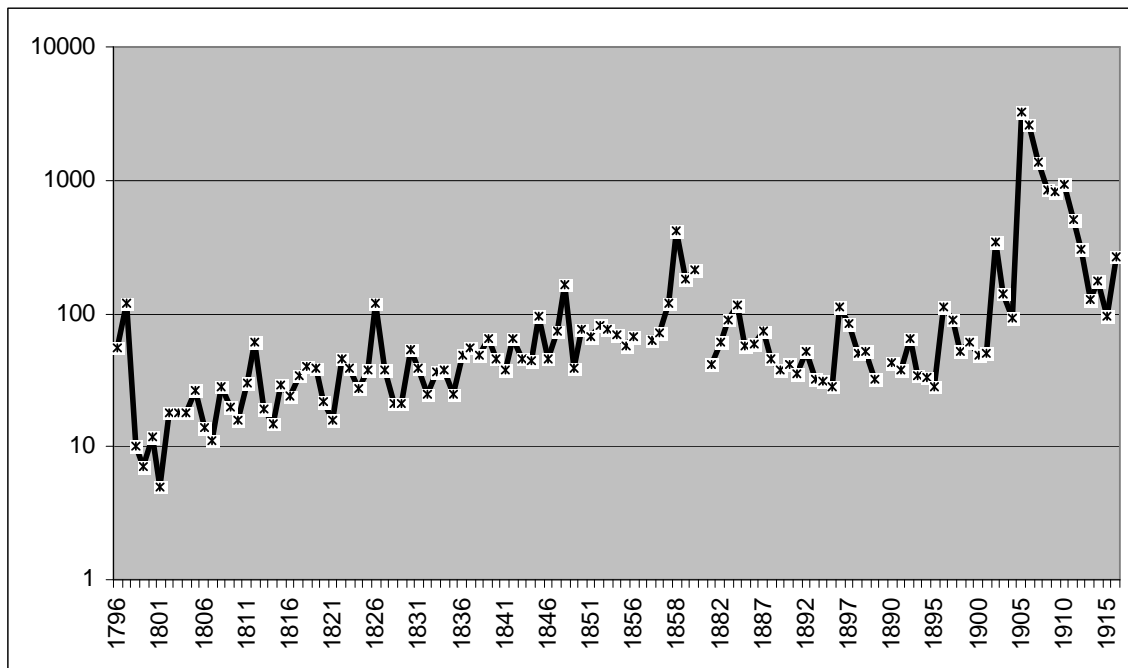
10-30 a year in the early 1800 to 300 before the Emancipation Act of 1861 to 3000 during the first Russian revolution of 1905-07 (fig. 7), whereas the crime rate increased more than threefold in 1850-1910 – from 500 to over 1500 per 100,000 inhabitants (fig. 8).

Table 3. Increase in inequalities in Russia in 1600-1900. Social structure of Russian peasantry, % of total

Years	Wealthy	Middle	Poor
1600-1750	15	53	32
1751-1800	10	48	42
1801-1860	16	56	30
1896-1900	18	23 	59

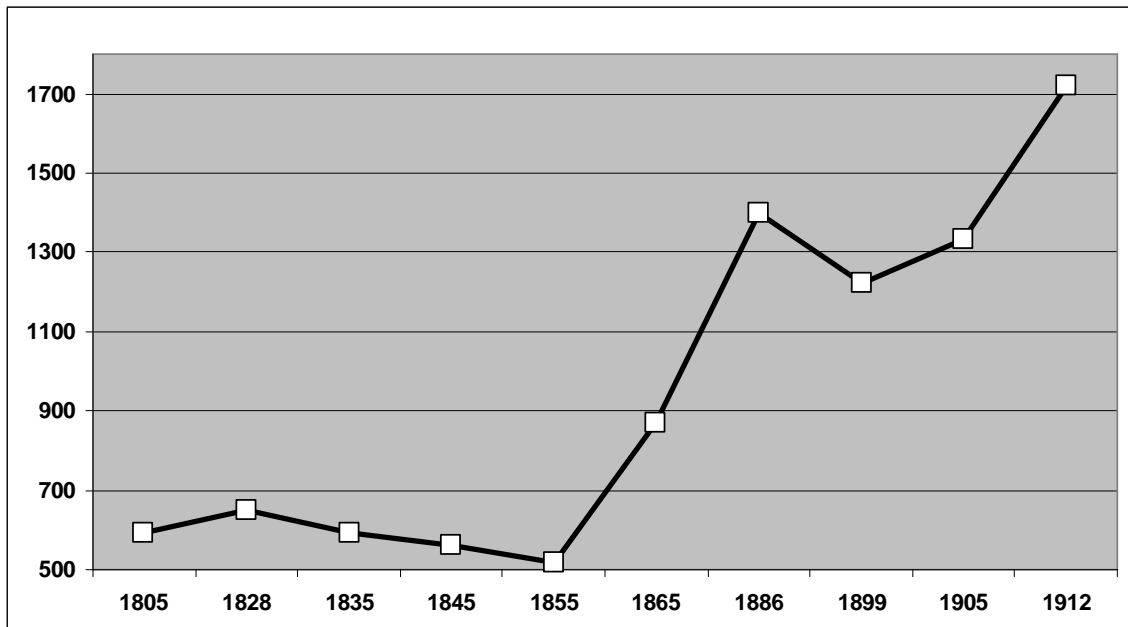
Source: Turchin and Nefedov (2009, p. 277).

Fig. 7. The number of peasant disturbances per year in 1800-1920



Source: Dubrovsky (1956), Litvak. (1967), Zayonchkovsky, P. (1963) cited in Turchin and Nefedov (2009: 286).

Fig. 8. Number of total crimes per 100,000 inhabitants in Russia in 1800-1920



Source: Mironov (2000) cited in Turchin and Nefedov, p. 285.

In short, by the early XX century capitalism could have been quite successful economically, but a total failure from a social point of view – two Russian 1917 revolutions were a proof of the capitalist suicidal tendencies in the absence of proper checks and balances. After 1917 and especially after the Second World War and the creation of the world socialist system, capitalism had to adjust to look competitive – social expenditure in the West increased greatly, welfare programs mushroomed and income inequalities decreased significantly – up until the early 1980s (the data are in the third section of the paper).

The rise and fall of Soviet socialism

The 1917 revolutions were the natural reaction to the misfortunate post 1861 reform developments. The great socialist experiment in Russia (1917-91) – the courageous attempt to restore social justice and institutional capacity of the state – resulted in the decrease in wealth and income inequalities, mortality, crime rate and shadow economy. The belief also was that socialist centrally planned economy (CPE) would achieve higher productivity than capitalism

and that remaining capitalist countries will eventually face the option of falling behind the Soviet Russia in per capita income or switching to socialism.

Socialist thinkers – from Thomas Moore and Tommaso Campanella to Saint-Simon, Fourier and Owen to Marx, Engels and Lenin – were dreaming about more rational and just society not without a reason. The deficiencies of the capitalist market were obvious and numerous. Equilibrium in the market economy is achieved only through deviations from equilibrium. All kind of supply and demand shocks in different markets push the economy out of equilibrium. There is permanent unemployment and there are unloaded production capacities. There is a business cycle – periodically, once in 5 to 10 years, capitalist economy gets into a recession, i.e. experiences contraction of output that lasts 1 to 2 years. Markets fail in many instances – in providing public goods, in adequately regulating externalities, in selecting projects with long term time horizon (like fundamental research, development of new territories and/or industries).

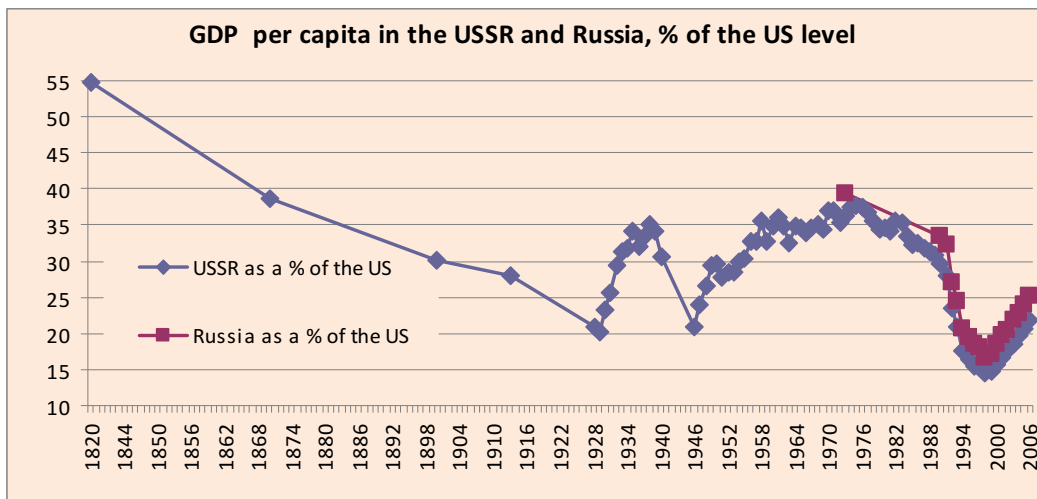
There is hardly any social justice – when prices fall due to overproduction, even most diligent and efficient producers cannot recover their costs, whereas when prices rise due to shocks (for instance, increase in demand for national flags after 9/11), producers get windfall profits. There are bubbles and huge volatility in stock and real estate prices, resource prices and exchange rates. “Irrational exuberance” – an expression used by Federal Reserve Chairman Alan Greenspan – is not an exaggeration or a temporary and limited in space phenomenon, it is rather an essential, permanent and pervasive characteristic of many markets, from stock market to commodities markets. It is impossible to explain rationally how prices of oil, for instance, go from \$13 (1998) to over \$100 (2008) in a matter of several years in the absence of major change in fundamentals. The human being, the crown of creation, whose mental abilities are second to none, is being reduced to being an instrument of the market forces; her destiny and wellbeing are determined by the merciless and often irrational mechanics of the markets that she neither understands, nor controls.

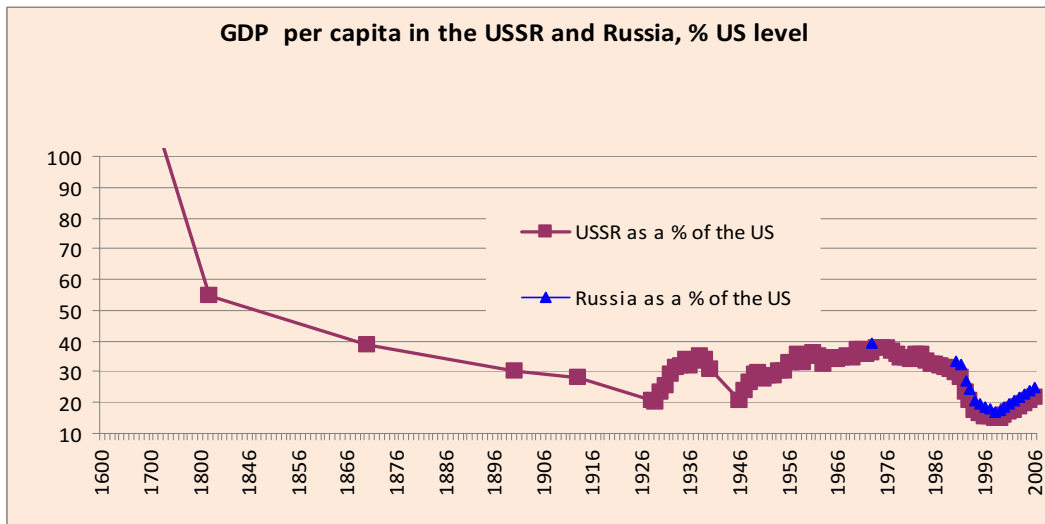
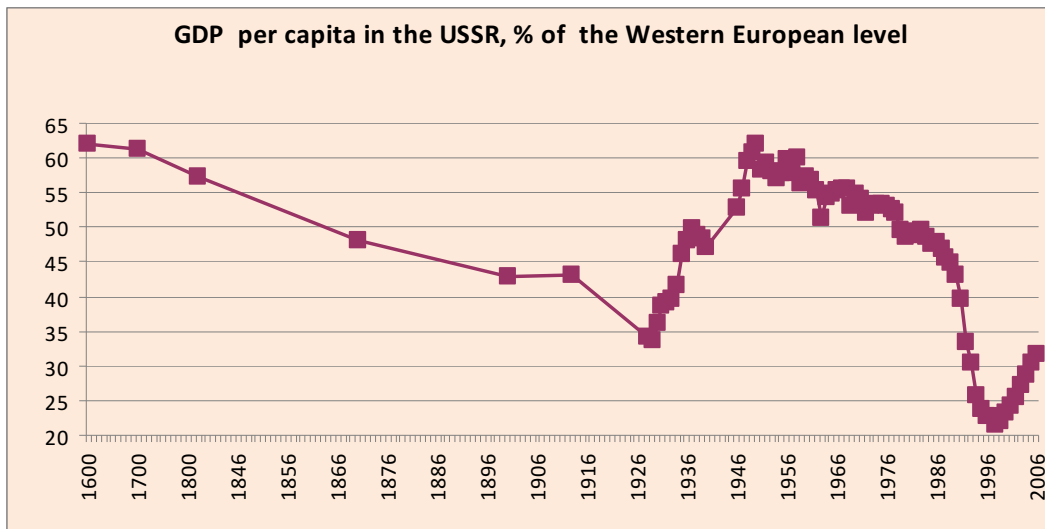
As early theoreticians of socialism believed, a centrally planned economy organized rationally – the whole society working as one single plant – should be able to avoid these losses and thus to achieve higher efficiency. “In the last analysis, – wrote Lenin in 1919, – productivity of labour is the most important, the principal thing for the victory of the new social system. Capitalism created a productivity of labour unknown under serfdom. Capitalism can be utterly

vanquished, and will be utterly vanquished, by the fact that socialism creates a new and much higher productivity of labour” (Lenin, 1919, p. 231). And initially it seemed like the prophecy was coming true – the USSR was doing better than any other developing country in terms of catching up with the West.

Soviet catch-up development looked extremely impressive until the 1970s. In fact, from the 1920s to 1960s, the USSR and Japan were the only two major developing countries that successfully, if only partially, bridged the gap with the West (fig. 1). Russia was permanently falling behind the West in the 16-19th century – neither reforms of Peter the Great in the early 18th century, nor the elimination of serfdom in 1861 (Emancipation Act), nor Witte’s and Stolypin’s reforms in the early 20th century could have changed the trend. Only in the 1920s-60s Russia (USSR), for the first time in its history, started to catch up with the West (fig. 9).

Fig. 9. PPP GDP per capita in the USSR and Russia, % of Western European and US level





Source: Maddison, 2010.

Despite popular beliefs that Soviet economic development was a failure, the USSR in 1928-70 was the second fastest growing country in world after Japan (Allen, 2003, fig. 1.1, p.7). Many developing countries all over the world were trying to copy the Soviet model in the 1950s-60s, even though Soviet assistance at that time was minimal and in any case way below Western assistance. The Soviet model at a time was probably no less attractive for the developing world than the Chinese economic model today.

“Red Plenty”, a novel by Francis Spufford, nicely captures the atmosphere of that time – the belief that the gap between the USSR and the West is closing down and will disappear soon

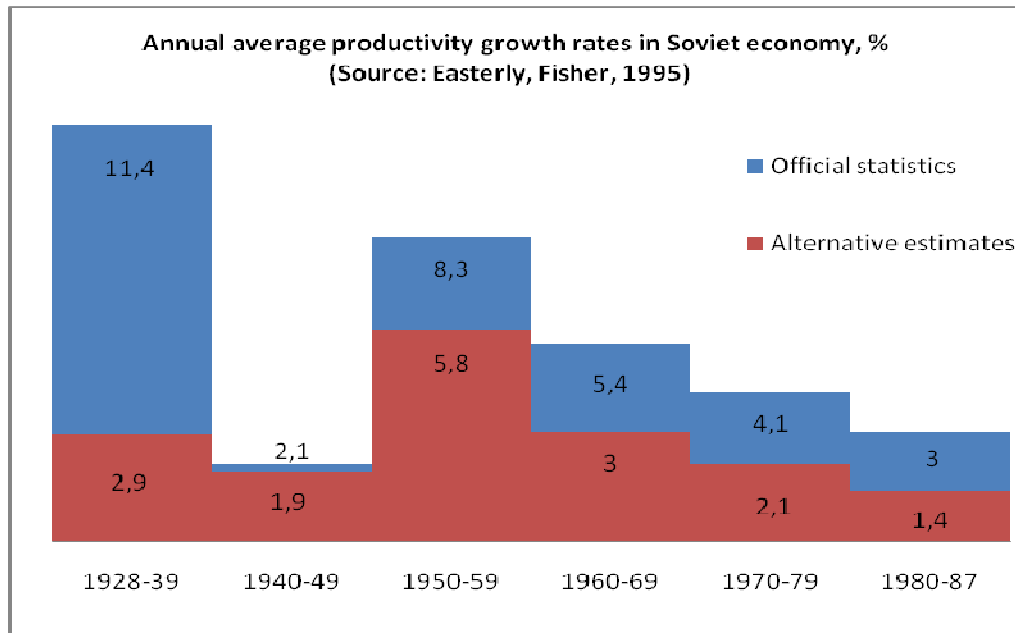
because socialism is not only a more advanced social system, but also a more competitive economy. During the famous “kitchen debate” of 1959 Soviet leader Nikita Khrushchev famously refused to admit that capitalism can have better innovations at least in some areas. Richard Nixon, the US vice president, opening an American exhibition in Moscow, offered a diplomatic formula – you are ahead in space, we are ahead in colored TV, let us compete for the benefit of consumers in both countries. Khrushchev, as soon as Nixon’s words were translated to him, raised his hand up in objection: we surpassed you in rockets, we’ll surpass you in TV, he said (Khrushchev and Nixon, 1959). Not only in the Soviet Union, but in the world, many people at that time sincerely believed that this is exactly what is going to happen. That was the spirit of the time in the period when the Soviet system was retaining its dynamism and catching up with the West.

In the second half of the 20th century, however, the Soviet Union experienced the most dramatic shift in economic growth patterns. High post-war growth rates of the 1950s gave way to the slowdown of growth in the 1960s-1980s and later – to the unprecedented depression of the 1990s associated with the transition from CPE to a market one. Productivity growth rates (output per worker, Western data) fell from an exceptionally high 6% a year in the 1950s to 3% in the 1960s, 2% in the 1970s and 1% in the 1980s (fig. 10). In 1989 transformational recession started and continued for almost a decade: output was constantly falling until 1999 with the exception of one single year – 1997, when GDP increased by barely noticeable 0.8%. If viewed as an inevitable and logical result of the Soviet growth model, this transformational recession worsens substantially the general record of Soviet economic growth.

Where have all Soviet competitiveness gone? It is important to separate the inherent deficiencies of CPE from the numerous problems resulting from “bad implementation” and caused by specific historical circumstances.

It is well documented that the CPE has a lot of deficiencies associated with the practical impossibility to establish billions of industrial proportions (to balance supply and demand for millions of goods and services) from the centre, especially in a dynamic economy with unpredictable technical progress and innovations. Even with the use of input-output models and most powerful computers it was actually possible to develop a reasonable balanced plan for less than 1% of products (at the very best), for which the planners actually established production quotas in physical units.

Fig. 10. Annual average productivity growth rates in Soviet economy, %



Source: Easterly, Fisher, 1995.

Even if the information gathering and processing problem is resolved, if all technological coefficients (expenditure of i -input for the production of j -good) are precisely calculated and infinite size matrix can be easily inverted by super powerful computers, the dynamic problem still persists. Technological coefficients tend to change and new products tend to emerge not according to a plan, but spontaneously, due to technical progress that is not predictable by definition. This was exactly the argument of Ludwig von Mises (1920) in his article "Economic Calculation in the Socialist Commonwealth". It was later developed by Friedrich Hayek (1944) in "The Road to Serfdom" – he argued that the planners will never have enough information to carry out reasonable allocation of resources. In his lecture "Competition as a Discovery Procedure" he argued that outcomes of competition are "unpredictable and on the whole different from those that anyone would have been able to consciously strive for" (Hayek, 1968, p. 10).

Hence, there were losses caused by the unreliable supplies – low capacity utilization rate, high inventories, poor specialization of enterprises, that tended to do everything themselves not to

be too dependent on suppliers, and as a result – poor and falling capital productivity (Shmelev, Popov, 1989). But all economic systems have losses, so costs have to be weighted against benefits. And the benefits of CPE – the ability to mobilize domestic savings at a low level of development without increasing income inequality and hence the possibility to speed up growth, so as to ensure catch up development – seem to be spectacular as compared to costs of inefficiency.

Leonid Kantorovich, the only Soviet economist that won the Nobel Prize (in 1975 together with an American Tjalling Koopmans), published in 1959 “*The Best Use of Economic Resources*” (Kantorovich, 1959), proving mathematically that not only equilibrium, but also equilibrium at the optimal level is theoretically possible in a static CPE. Even more so, this equilibrium could be attained through setting prices for inputs and outputs (“objectively determined valuations” – shadow prices), not through setting production quotas in physical units (so called “dual problem” of production planning). At a time it looked very much like the planning of millions of inputs and outputs and planning of technical progress could become reasonably efficient within in the nearby future with greater capacity of computers and better techniques to manage unforeseen developments.

Besides, theoretically at least, the CPE probably could have avoided the huge decline in capital productivity during the emergence of the command economy – in the USSR the growth rates fell from 20% in the 1920s to 10% in the 1930s in industry even though the investment ratio (the share of investment in GDP) increased from 13 to 26% (Shmelev, Popov, 1989). In China, however, the emergence of CPE was not associated with such a waste in resources in a form of declining capital productivity as in the USSR in the 1930s. And of course the argument about the inefficient use of savings makes sense only if these savings are available, whereas many developing countries were not able to mobilize savings in the first place.

Theoretically, industrial policy in the USSR could have been better than the actual import substitution type that was never replaced by export orientation. It is inevitable that a country in need of industrialization starts with the import substitution policies (because the creation of new industries that were absent before results in crowding out foreign goods from domestic market), but there is a need to switch to export orientation at an appropriate point. If enterprises eventually do not become competitive in the international market, they evolve into grandiose, but useless “industrial dinosaurs” and “Egyptian pyramids” that can exist only behind a

protectionist wall and that go bankrupt as soon as they are exposed to the winds of international competition. But there are examples of export orientation within the framework of the CPE: China started to increase its exports at double digit rates from the early 1970s, well before the market type reforms.

Theoretically at least, the CPE by keeping inequalities low could have avoided such costs as the increase in mortality and deterioration of the institutional quality. In practice, of course in the USSR and in China there were famines caused by economic reasons and there was some weakening of the institutions in the USSR during the 1970s-80s, but these features do not look like imminent and unavoidable.

The inherent deficiency of the CPE – the lack of the mechanism to replace managers and bureaucrats under authoritarian regime. Neither in Eastern Europe, nor in the USSR, nor in Cuba and Korea the top leaders were replaced before death. (It happened for the first time only in China with Deng's voluntary resignation from all posts in 1990; afterwards it became a rule). And neither the Soviet experiments with the *sovnarkhozy* (territorial management bodies created in 1957-65 intended to replace industry branch ministries and to undermine the positions of the ministerial bureaucracy), nor Chinese experiments of replacing the cadres during Cultural Revolution could be considered successful. However, from pure economic point of view, this could have become the growth constraint in the future, but was not really constraining growth in the 1970s-80s.

The quality of state institutions at the end of the planning period in China and in the USSR was quite high, higher than in democratic countries of the same level of development. The shadow economy that was reaching under Brezhnev 10-15% of GDP by most generous estimates increased to 50% in the 1990s. In the 1980s the corruption perception index (CPI) in the USSR and China was about 5 – both countries were in the middle of the list of 54 countries – cleaner than all developing countries and close to countries like Greece, Italy, Portugal, and South Korea. In 1996, after transition to the market economy and democracy, in the same list of 54 countries Russia moved to the 48 place – between India and Venezuela. In 2011 Russia had a CPI of 2.4, China– 3.6, whereas Cuba – 4.2.

But there are some deficiencies of the CPE that were inevitable and could not have been avoided even theoretically. What really became the insurmountable and binding growth constraint in the 1970s-80s in the Soviet Union (but not in China) was the “aging” of the CPE resulting from aging of the fixed capital stock and the inability of the CPE to replace the retiring machinery and equipment, buildings and structures without aggravating shortages and lowering capacity utilisation rate. As argued in Popov (2007), the CPEs under-invested into the replacement of the retiring elements of the fixed capital stock and over-invested into the expansion of production capacities.

As was already mentioned, shortages were inevitable in CPE almost by definition. And capital investment was regarded as a major tool of eliminating the bottlenecks resulting from shortages. So capital investment was diverted to create new production capacities that would have allowed expanding production of scarce goods. The whole planning procedure looked like an endless chain of the urgent decisions forced by emergency shortages of different goods that appeared faster than the planners were able to eliminate them.

This was a sort of a vicious circle, a permanent race against time, in which decisions to make capital investment were predetermined by existing and newly emerging shortages. It turned out, therefore, that any attempts to cut the investment in new plant and equipment led to increased distortions and bottlenecks, resulting, among other things, in the lower capacity utilization rate, while the increased investment in the construction of new production facilities contributed to the wear and tear of fixed capital stock and to the widening of the gap between job vacancies and the limited supply of the labour force, also causing the decline in the capacity utilization. Under central planning, unfortunately, there was no third option.

It was more or less possible to fight shortages in the CPE in the first 20-30 years after the “big push” when all available savings could have been used for eliminating constantly emerging bottlenecks, but after this period, when part of the savings had to be used to renovate the aging fixed capital stock, the remaining part was just not enough to deal with the bottlenecks. The choice was either not to renovate and to use all savings for shortages-eliminating investment, or to renovate at a price of aggravating shortages. Needless to say, both options were bad, leading to declining capital productivity.

Not surprisingly, after the massive investment of the 1930s in the USSR, the highest productivity was achieved after the period equal to the service life of capital stock (about 20-30 years) – before there emerged a need for the massive investment into replacing retirement. Afterwards, the capital stock started to age rapidly reducing sharply capital productivity and lowering labour productivity and TFP growth rates.

Among many reasons of the decline of the growth rates in the USSR in the 1960s-1980s, the inability of the CPE to ensure adequate flow of investment into the replacement of retirement of fixed capital stock appears to be most crucial one. What is more important, even if these retirement constraints were not the only reason of the decline in growth rates, they are sufficient to explain the inevitable gradual decline after 30 years of relatively successful development. This way or the other, after the massive investment of the 1930s in the USSR (the “big push”), the highest productivity was achieved after the period equal to the service life of capital stock (about twenty years) before there emerged a need for massive investment into replacing retired stock. Afterwards, capital stock started to age rapidly, sharply reducing capital productivity and lowering labor productivity and the TFP growth rate.

If this explanation is correct, a CPE is doomed to experience a growth slowdown after three decades of high growth following a “big push”. The relatively short Chinese experience with the CPE (1949/59-79) looks superior to the East European experience (1950-1991) and excessively long Soviet experience (1929-91). It was only the USSR that fully experienced all the negative consequences of aging of the CPE. This is one of the reasons to believe that transition to the market economy in the Soviet Union would have been more successful if it had started in the 1960s.

Was it possible – the transition to a market economy in the USSR in the 1960s? Most probably, yes. It was a junction that happens in a development process from time to time, when the outcome – the route to take for the next several decades, if not centuries, – is determined not so much by historical necessity, but by the confluence of circumstances, by the interplay of minor events that could produce different trajectories. If this transition to the market would have been carefully managed, the outcome probably could have resembled more a Chinese pattern of market type reforms of the 1979 and beyond – without major transformational

recession, without dramatic weakening of state institutions and virtual privatization of the state, without skyrocketing growth of shadow economy, crime, suicides and mortality.

But, there were reasons why the transition to the market in the USSR in the 1960s could have been less successful than the Chinese. Socialism contributed to the restoration of the collectivist institutions in both countries, Russia and in China: income inequalities decreased and institutional capacity of the state improved. But the legacy of 300 years of Westernization in Russia kicked back once market reforms were carried out in the 1990s, after 70 years of socialism: inequalities increased greatly, as did corruption, crime, and shadow economy. What could have been repaired in China in 30 years of socialism, could not have been fixed in Russia even after under 70 of socialism and 60 years of central planning (since 1929), not to speak about 30 years.

Russia could have returned to the pre-1917 trajectory of adopting the Western institutions with high income inequalities and polarization of the society (pretty much like it did in the 1990s). Transformational recessions could have been shorter and not so deep, but the weakening of the institutions – increase in crime and shadow economy – would be pretty much inevitable (Popov, 2009; 2014).

In reality though, there was no transition to the market in the 1960s, so in the absence of rotation and control from below over managerial cadres and the inability of the CPE to renovate capital stock, bureaucratization of apparatus and aging of equipment and structures led to the growth slowdown. *Sovnarkhozy* reform (1957-65) designed to renovate cadres and officials, and *khozraschet* reforms (1965) designed to stimulate innovations and growth basically failed. Since the mid 1960s there started a decline of the CPE in the USSR. Growth of GDP per capita in the USSR continued in the 1970s and 1980s, but the rates of growth were slowing down, so that the income gap with the West stopped closing and then started to widen. Life expectancy after reaching 70 years in 1965 stopped growing, crimes, murders, suicides started to increase.

To conclude, overall the record of the Soviet regime in maintaining economic growth and high level of welfare indicators is quite spectacular, especially until the late 1960s. Since the mid 1960s, however, growth started to slow down, whereas social evils – mortality, crime, murders,

suicides, alcohol consumption – started to increase. In political and social life Khrushchev thaw came to an end by mid 1960s (Khrushchev was removed from power in 1964), and the hopes of transforming the Soviet regime into “socialism with human face” were buried in 1968, when the Soviet troops were moved into Czechoslovakia. The primary reason for the slowdown of growth was the inability of the CPE to replace the retiring fixed capital stock without aggravating shortages. When in the 1960s, 30 years after the “big push”, time finally came to make such investment, the economy started to slow down.

In contrast, Chinese model probably retained the possibility to transform itself into market socialism with limited private property of the means of production and low income inequalities. But inequalities started to rise in China after 1985 (after the industrial reform was launched in 1983), “growing out of socialism” – creation of private enterprises from scratch – made private property predominant in the late 1990s, effectively transforming China into the capitalist society.

The great socialist experiment of the XX century thus came to an end with only Cuba and North Korea stepping into the XXI century as socialist countries. But as the old top down socialism of the XX century is dying out, the new grass root socialism may be growing from below.

New rise of socialism – low inequalities with high savings

Capitalism did not exist for the major part of recorded human history, until 16th century, because it could not be competitive. Putting individual rights ahead of the interests of the community was good for savings, investment and growth, but socially ruinous because of the increase in income inequalities that undermined social cohesion of the traditional societies and put masses of the population below survival line. Since 16th century capitalism became more competitive than any other form of social organization mainly due to its ability to mobilize savings through increased savings rate. But this advantage was operational only at relatively low levels of development, say at a level of per capita income from \$500 to \$25,000 in today's prices⁶. In countries with higher personal income reasonable savings rates can be generated without high inequalities: if there is an optimal savings rate for the society as a whole, and if

⁶ The exact borders may be different, empirical research is needed to determine these borders. The hard fact, however, is that after \$25,000 per capita income the increase in the savings rate in the cross country comparison is very marginal, if any (fig.3).

savings rate increases with per capita income, it may well be that this optimal saving rate could be achieved in middle income countries with very low inequality. On the other hand, at the high levels of income, inequality does not contribute that much (and may be not at all) to the national savings rate.

The destruction of communal, collectivist institutions that was first carried out in Western countries in the sixteenth to nineteenth centuries was accompanied by an increase in income inequality. The available data (Milanovic, Lidert, and Williamson, 2007) suggest that in England, Holland, and Spain in the eighteenth century, the Gini coefficient of income distribution was at a level of 50 and even 60 percent (table 4)⁷—an extremely high level according to today’s standards and, most probably, according to the standards of the distant past (about 40 percent in Rome in the first century and in Byzantium in the eleventh century — table 4). In Denmark – a country with very good statistical records on individual incomes – the share of top 10% in total income in 1870-1920 was always over 40% (reaching 54% in 1917), whereas Gini coefficient for this period was always higher than 40%, exceeding 70% in 1917 (Atkinson, Søgaaard, 2013).

Table. 4. Gini coefficients around particular years in Western countries, %

Years	14	1000	1290	1550	1700	1750	1800	2000
Rome	39							
Byzantine		41						
Holland				56		63	57	30.9
England			36.7		55.6	52.2	59.3	37.4
Old Castille/Spain						52.5		34.7
Kingdom of Naples/Italy							28.1	35.9
France							55	33

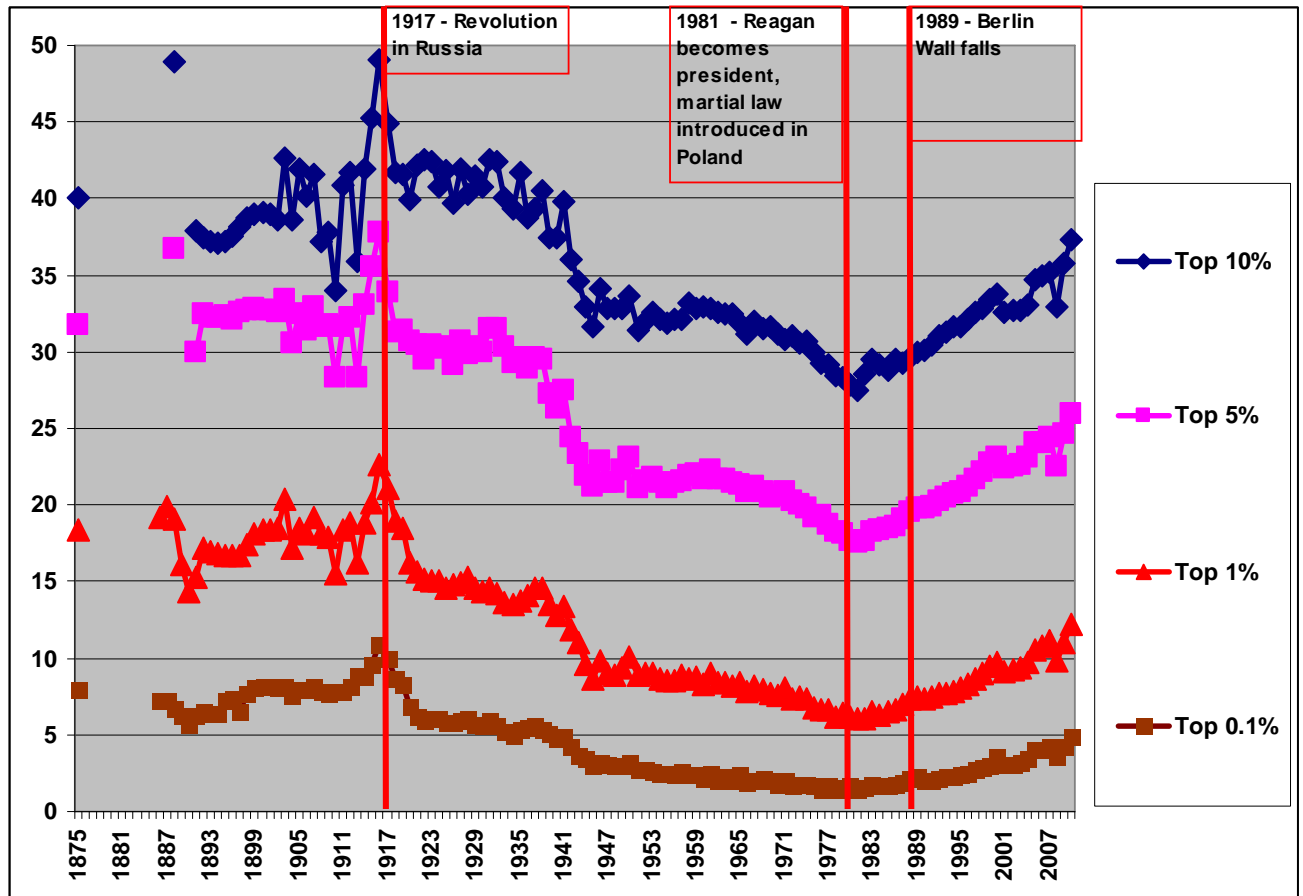
Source: Milanovic, Lindert, Williamson, 2007; Modalsli, 2013; data for 2000 are sometimes from the WDI.

Only in the 20th century the trend towards increase in income and wealth inequalities was temporarily interrupted, most probably because of the checks and balances that the socialist

⁷ In England and Wales, the Gini coefficient increased from 46 percent in 1688 to 53 percent in the 1860s (Saito, 2009).

countries with very low inequalities (25-30% Ginis) provided for the capitalist system (fig. 11⁸).

Fig. 11. Income shares of top 0.1, 1, 5 and 10% in 17 developed countries, unweighted average



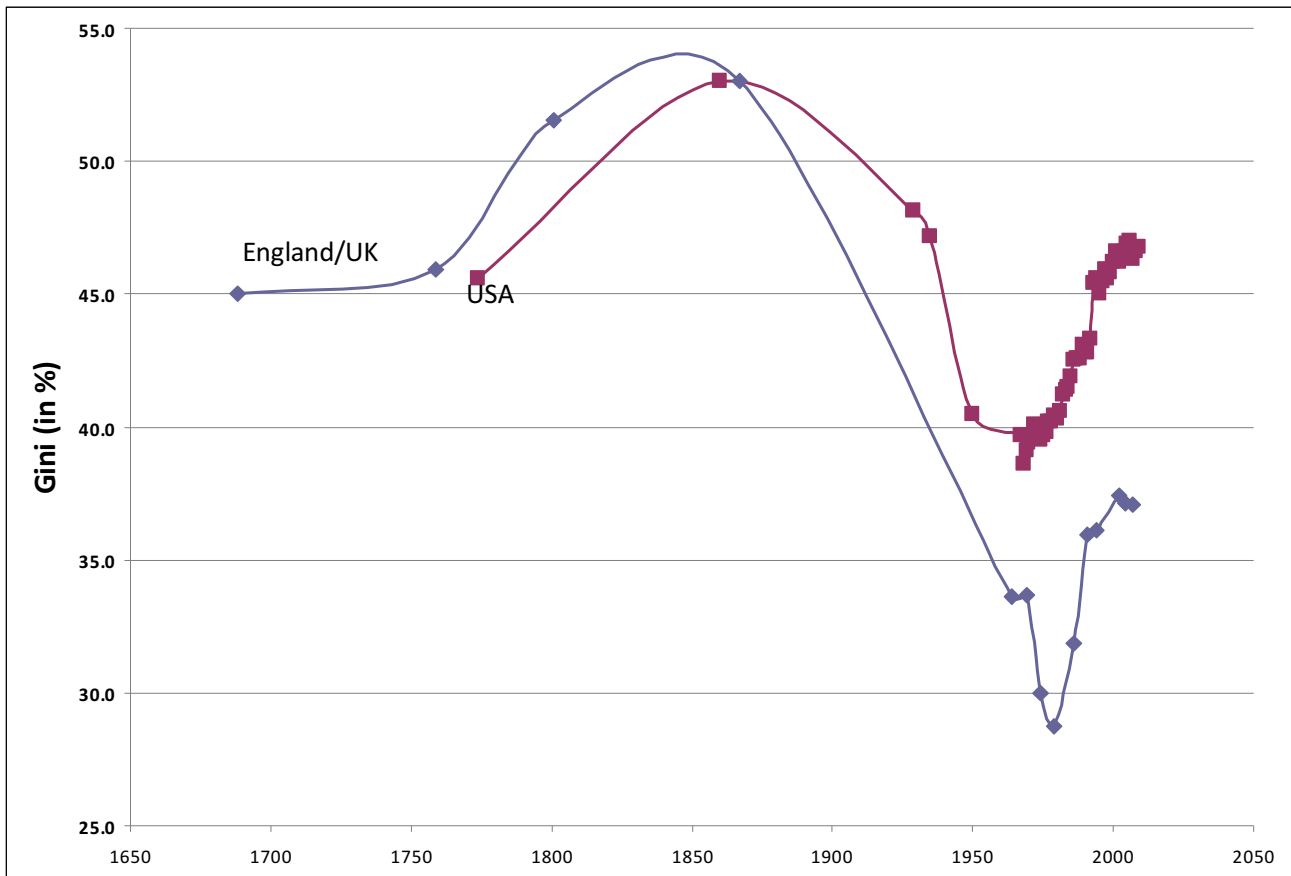
Note: Unweighted average for Australia, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand Norway, Portugal, Spain, Sweden, Switzerland, UK, United States.

Source: Alvaredo, Facundo, Anthony B. Atkinson, Thomas Piketty and Emmanuel Saez, The World Top Incomes Database, <http://g-mond.parisschoolofeconomics.eu/topincomes>, April 25, 2012.

Data for Britain and the US based on the reconstruction of the social tables for the pre-modern period provide a similar picture – increase in inequalities before the 1860s and decline in the 1930s-80s (comparable data on 1867-1929 period are missing) – fig. 12.

⁸ These are the data on pre-tax income and they come not from household surveys, but from tax returns. There are some discrepancies between the two, but the data from household surveys for more recent periods show similar *time* trends, although inequalities in income after taxes are generally lower than before taxes.

Fig. 12. Inequality in the US and UK over the long run, Gini coefficient, %

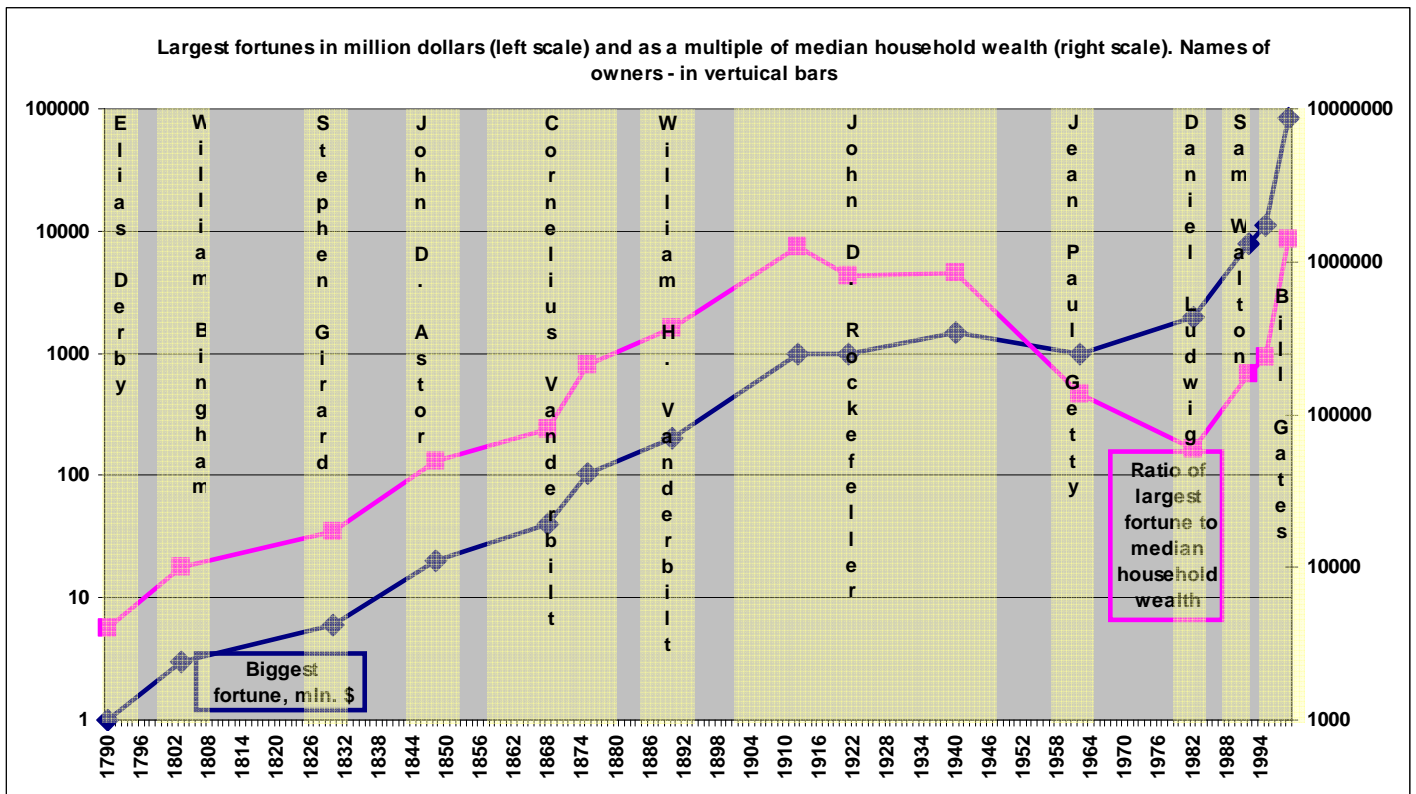


Source: Ginis are computed by B. Milanovic from social tables before the 20th century and from household survey and tax returns afterwards (Milanovic, 2013; Milanovic, Lindert, Williamson, 2007; and personal correspondence with B. Milanovic).

In the United States income and wealth inequalities initially, in the late 18th century, were most probably lower than in Europe due to the absence of large accumulated fortunes in the New World and the abundance of free land. In the late 18th century top 10% of wealth holders accounted for only 45% of total wealth in the US as compared to 64% in Scotland and 46-80% in Finland, Norway, Sweden and Denmark (Soltow, 1989, p. 238). But it appears that inequalities increased greatly in the 19th century and in early 20th century reaching a peak in between two world wars. Soltow (1989, p. 251) finds some decrease in income inequality in 1798-1850/60 in the US and slight or no increase in the wealth inequality in the same period, but the ratio of the largest fortunes to the median wealth of households (Phillips, 2002) tells a different story (fig. 13). This ratio increased from 1000 in 1790 (Elias Derby's wealth was

estimated at \$1 million) to 1 250 000 in 1912 (John D. Rockefellers's fortune of \$1 billion), fell to 60 000 in 1982 ("only" \$2 billion fortune of Daniel Ludwig) and increased again to 1 416 000 in 1999 (\$85 billion fortune of Bill Gates). Turchin (2013) regards this dynamics as "repeated back-and-forth swings", but recognizes that the decline in inequality after 1917 was associated with the rise of the workers movement in the US and "the lure of Bolshevism".

Fig. 13. Largest fortunes in the US in million dollars and as a multiple of the median wealth of households, log scale

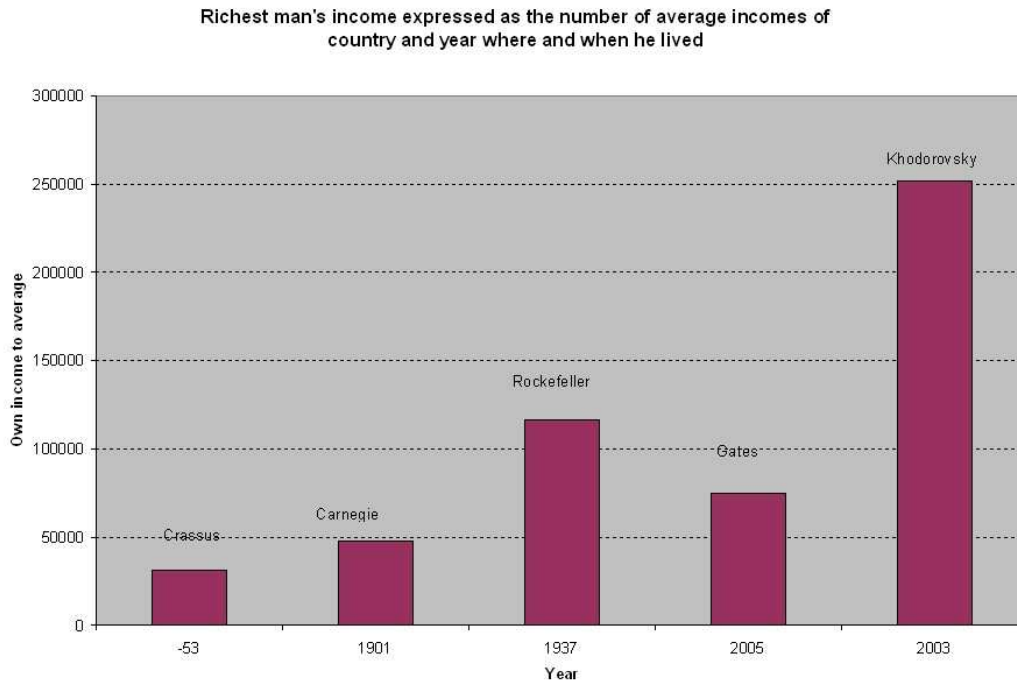


Source: Phillips, 2002, p. 38.

The comparison of wealth of richest tycoons of all the countries and epochs (fig. 15) gives different numbers (it is in relation to average income, not to average household wealth), but basically the same conclusion – Bill Gates was relatively (as compared to the average income in the US) poorer than Rockefeller, but richer than Carnegie and Crassus, whereas Russian tycoon Michail Khodorkovsky in 2003 was relatively (as compared to the average income in

Russia) richer than all of them. The world may not have reached the highest point of inequality yet, but may be moving to the greatest inequality that was ever observed in human history.

Fig. 14.



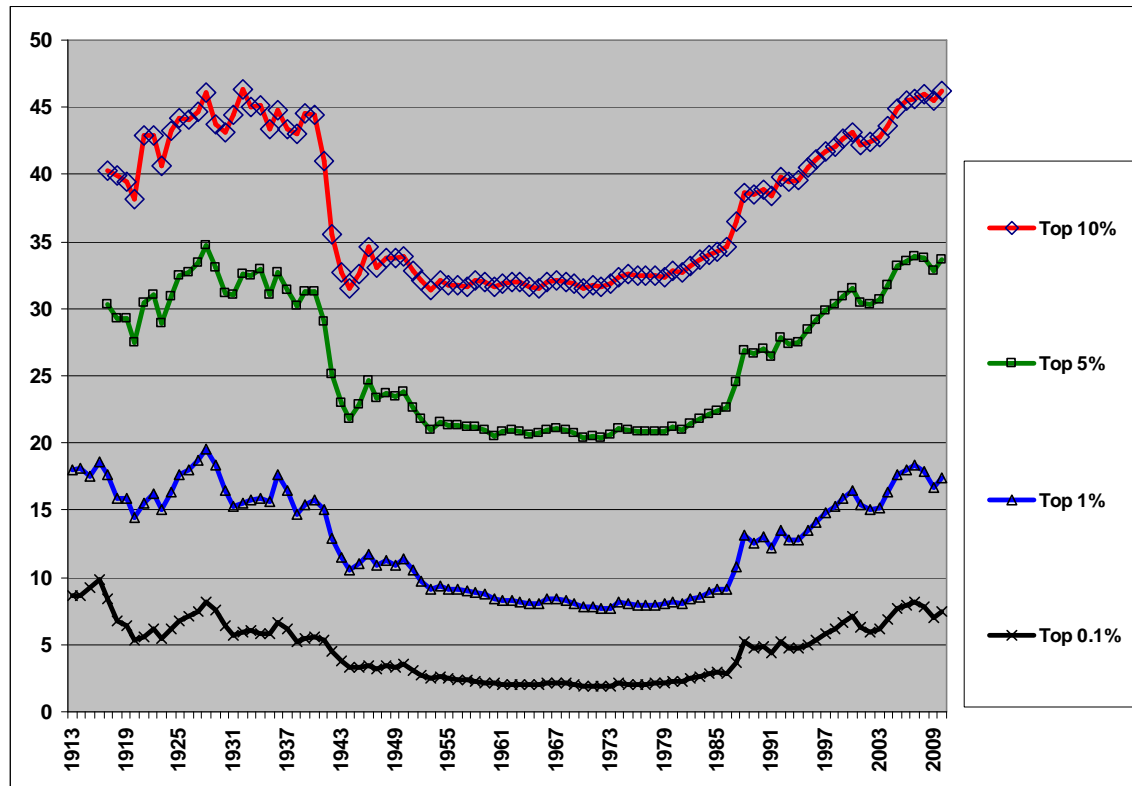
Source: Milanovic, 2011.

Data on pre-tax income from income tax returns show very high income inequalities in the US before the second World War, in 1913-1940 (fig. 15).

Income inequality, of course, goes together with weak institutional capacity, as measured by the murder rate (fig. 16). Subjective measures of the institutional capacity – various indices, such as ICRG (international country risk guide), government effectiveness, rule of law, corruption perception indices, doing business index, etc. are negatively correlated with income inequalities. Islam and Montenegro (2002) claimed that income inequalities do not influence institutional capacity, but they were able to arrive at this result only by introducing dummy variables for LA and SSA – two most unequal regions of the world. In a more recent and more accurate study (Alonso, Garcimatrín, 2013), making all efforts to control for endogeneity, income inequalities have strong and significant impact on virtually all institutional indices even after introducing regional dummies for LA and SSA. Together with per capita GDP and

government tax revenues they explain 60 to 80% of variations in the quality of institutions as measured by the four out of six indices of the World Bank (government effectiveness, control over corruption, rule of law, regulatory quality, but not political stability and transparency and accountability), Transparency International Corruption Perception Index, Global Competitiveness Index (Institutions component) of the World Economic Forum, Objective Governance Indicators and Doing Business Indicators (Alonso, Garcimatrín, 2013).

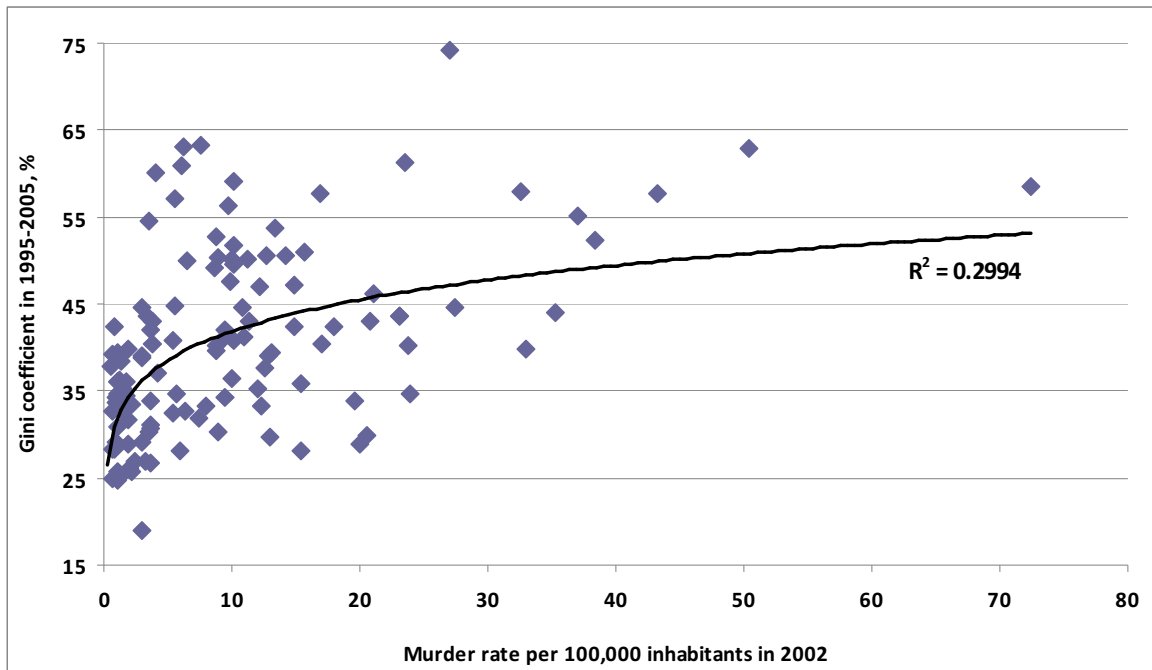
Fig. 15. Long term trends in income inequalities in the US, 1913-2010



Source: Alvaredo, Atkinson, Piketty and Saez (2012).

Past and recent research shows that inequalities are associated with an array of negative social consequences – from increase in crime and mortality to the decline in educational attainments and proliferation of psychological disorders and obesity (Wilkinson, Pickett, 2010). Besides, inequalities undermine social mobility and lead to the conservation of social stratification: the higher the inequalities, the higher the probability that ones' incomes will closely resemble that of their parents (the Great Gatsby curve). Hence social and very often political structure of the society becomes less flexible as well.

Fig. 16. Murder rate in 2002 and income inequalities in 1990-2005



Source: WHO, WDI.

“...Great economic inequality has always been correlated with extreme concentration of political power, and that power has always been used to widen the income gaps through rent-seeking and rent-keeping, forces that demonstrably retard economic growth” (Milanovic, Lindert, and Williamson, 2007).

As Joseph Stiglitz explains, “widely unequal societies do not function efficiently, and their economies are neither stable, nor sustainable in the long run...When the wealthiest use their political power to benefit excessively the corporations they control, much needed revenues are diverted into the pockets of a few instead of benefiting society at large... That higher inequality is associated with lower growth – controlling for all other relevant factors – have been verified by looking at the range of countries and looking over longer periods of time” (Stiglitz, 2012, p. 83, 117). Latin American countries, writes Stiglitz, may show the future to other states that are just stepping on the road leading to growing inequalities. “The experience of Latin American countries, the region of the world with the highest level of inequality, foreshadows what lies ahead. Many of the countries were mired in civil conflict for decades,

suffered high levels of criminality and social instability. Social cohesion simply did not exist” (Stiglitz, 2012, p. 84).

Countries at a high level of development get more costs than benefits from high income inequalities – they are more likely than others to end up in a vicious circle: bad equilibrium with poor quality of institutions, low growth, low social mobility and high social tensions. It may take a revolution to break this vicious circle and to exit the bad equilibrium.

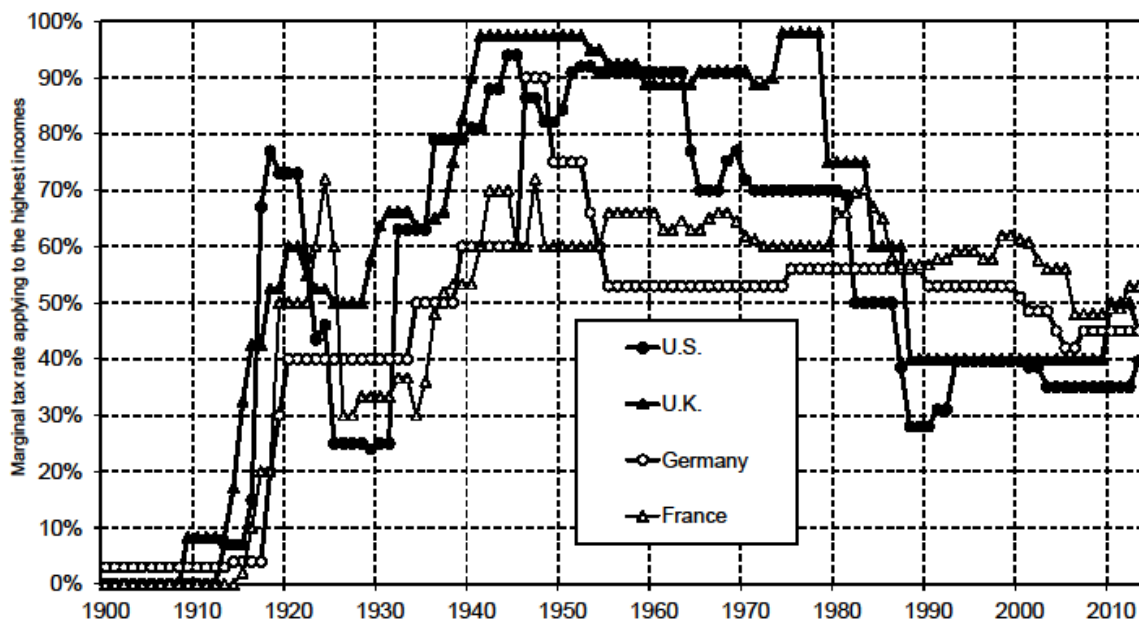
All previous anti-capitalist revolutions in the XIX and early XX centuries were strongly associated with, if not directly caused by growing income inequalities (1830 and 1848 in Europe, Paris commune of 1871 in France, 1905 and 1917 in Russia, 1918 in Hungary and Germany). These revolutions happened not because capitalism became economically inefficient and could not manage appropriately productive forces whose social nature “has outgrown” private property. And these revolutions did not occur in most advanced countries, like the US and Britain. The real reason for these revolutions were social tensions caused by mounting income and wealth inequalities that have grown most significantly in continental Europe.

The troubling trend since the 1980s is the new rise in income and wealth inequalities in the West and in many developing countries (Jomo, Popov, 2013). According to Piketty (2014), the period of 1914-73 was an exception in the capitalist development due to two world wars and Great Depression, that resulted in the destruction of capital, strong social policies during the New Deal in the US and in Europe after the Second World War. This is definitely part of the story, but not the whole story. Strong social policies and declining inequalities of the post-war period are due not only to the threatening events like wars and depressions, but also to the existence of the viable alternative to capitalism in the form of the world socialism.

In a similar vein, today there is a more immediate reason for the possible continuation of the increase in inequalities – elimination of checks and balances that world socialism and workers movement posed to world capitalism before. Some time in the 1970s it became clear that the world socialism is not catching up with the West, and that it is no longer an appealing alternative to capitalism. The wave of neo-conservatism, Thatcher in Britain and Reagan in the

US, with harsh policies towards the workers movement was the capitalist response to the new social configuration. Government spending, including social spending, stopped growing, many welfare programs were curtailed, unemployment rose to 50 years highs, trade unions had to retreat in many important strikes (coal miners in the UK, air traffic controllers in the US), their membership declined. Top income tax rates that were always higher than 50% in the US, UK, Germany, France in 1940-80 (and sometimes as high as 90%+), dropped to below 50% by 2010 (fig. 17). No surprise, income inequalities started to rise in most countries (fig. 11-14).

Fig. 17. Top income tax rates in the US, UK, Germany and France in 1900-2010, %



Source: Technical appendix of the book «Capital in the 21st century» by Thomas Piketty
 Harvard University Press - March 2014 (<http://piketty.pse.ens.fr/capital21c>)

The fall of the Berlin Wall, collapse of the USSR and the conversion of Eastern Europe and former Soviet republics to capitalism, added additional push to the growing income inequalities trend. Chinese transition to “socialism with Chinese characteristics” proved to be a transition to capitalism – private enterprises were rapidly emerging from scratch, creeping privatisation was going on since 1995, so by the turn of the XX century 75% of output was already produced at non-state enterprises. Income inequalities increased greatly in China and Chinese model started to loose its appeal as a more just alternative to the capitalist society.

It may be hypothesised that the continuation of these trends could result in two outcomes. First, there may be social upheavals in some countries, where social tensions due to growing inequalities will become unbearable and produce a socialist revolution, so the world goes once again over the familiar historical track. Even small socialist countries, like Cuba, if they are successful, may create a counterbalance through the demonstration effect to the tendency of unconstrained capitalism to cut welfare programs and increase inequalities.

Second, countries that carry out successful policies of limiting inequalities would become more competitive, driving other countries “out of business”. By limiting inequalities these societies will be drifting in the direction of socialism. They will likely remain market economies because by introducing central planning they will be running into the problem of creating imbalances and shortages and inadequate investment into the renovation of retiring capital stock – pretty much like “old” socialist countries in the XX century. But they will likely limit substantially the functioning of the market mechanisms through direct regulations and high progressive taxation to reduce bubbles and windfall profits. Besides, the crucial way of lowering inequalities is public and collective property, so it could be expected that state enterprises, non-profit institutions, labour managed enterprises and coops, operating not for profits, but for public good would become more common.

This would be the new grass root socialism growing from below and becoming more competitive than capitalist societies. The latter would have all the shortcomings of high inequality environment, from poor institutional capacity to greater social tensions, and no more advantages in the form of high savings rate that enables faster growth. If this hypothesis is correct, in the world of relatively high per capita income (over \$25,000, for the sake of the argument) socialist low inequalities countries and communities will have the same saving rate as capitalist societies with high inequalities. This is only a hypothesis though based on the projection of current trends into the future.

In lieu of conclusions

The impact of the crisis and eventual breakdown of world socialism on the fate of capitalism as a system was ambiguous and even treacherous. In a sense, the collapse of socialism played a

bad joke on capitalism. Socialism was “alter ego” of capitalism, it created checks and balances, forcing to limit capitalist greed for profits and to introduce social programs. Unconstrained capitalism, without the moderating impact of socialism, is likely to repeat the mistakes that it committed a century ago and that finally led to the emergence of socialism. It is likely to drive inequalities up to the extent of bringing capitalism to the point of inefficiency and perhaps even self destruction.

In short, capitalism is digging its own grave, to paraphrase the famous statement of Communist Manifesto, albeit not on the reasons, outlined by Marx and Engels. It is loosing its advantages (high savings rate today may be achieved without inequalities) and acquiring new deficiencies – worsening of the institutional capacity and mounting social tensions due to the rise in income inequalities. To put it differently, capitalism can exist without committing a suicide only with its socialist “alter ego” that prevents it from creating destructive inequalities and social tensions. Without socialism in sight, capitalist train inevitably develops a dangerous speed and can be saved from crash only by a turnover into the direction of socialism.

On the other hand, democratic socialism with limited central planning looks increasingly appealing and competitive. It can mobilize savings for growth without income inequalities, and it can avoid all nuisances of social polarization.

Socialism of the XX century emerged democratically at least in Russia, China, Korea and Cuba, supported by the majority of the population, but it did not manage to stay democratic. The new XXI century socialism that will emerge democratically and stay democratic can avoid mistakes of the old socialism. This “new socialism” will not necessarily mean a total elimination of markets and private property, but is likely to limit both substantially for the sake of achieving lower income inequality.

They say that all great ideas initially come to this world in a perverse form and socialism is no exception. This paper spells out reasons why the second attempt could be more successful. Old socialism of the XX century is dead. Long live new socialism of the XXI century!

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